HINTS

ON

GOVERNMENT EDUCATION

IN

INDIA;

WITH

SPECIAL REFERENCE TO SCHOOL BOOKS.

BY

JOHN MURDOCH, LL.D.

MADRAS:
PRINTED BY C. FOSTER AND CO.,
FOSTER PRESS, 23, SENDALL'S ROAD, VEPERY.
1873.

PREFACE.

The following remarks were suggested by the Resolution of Lord Northbrook with reference to the examination of Government School Books. (See page 3.) The present seemed a fitting time to offer any hints on the subject.

The writer makes no claim to novelty. It will be seen that the bulk of the pamphlet consists of extracts. To use a well-known illustration, the writer has done little more than supply the string which unites the flowers of the bouquet. The opinions expressed by the best authorities will carry far more weight than any remarks of the writer. Should it be objected that it is unnecessary to repeat what has already been said, it may be replied, that it would be so if the suggestions were already carried out. Till then, they require to be presented again and again.

The writer has endeavoured to adhere to the principles of the Education Despatch of 1854, as expounded by the manner in which Education has hitherto been conducted. His remarks have primary reference to Lower and Middle Class Schools, directly under Government. There are important questions connected with the Higher Education upon which he has not entered. Nor has he treated of the modifications which ought to be made in the teaching of Schools connected with Religious Societies. The subjects noticed in the pamphlet are sufficiently numerous without including other topics, which would require long discussion, and regarding which there would be widely conflicting views. The course of educational legislation at home and the recent remarks in Parliament of Mr. Grant Duff, afford no hope of a change in the direction wished for by some of the warmest friends of India.

MADRAS, *June 14th*, 1873.

CONTENTS.

	Page
Introduction	1
Improvement of School Books	4
Aims of Government Education	7
Promotion of Temporal Well-being of the People, 8. Intellectual Elevation, 13. Moral Improvement, 19.	
Grades of Schools	20
Classes of School Books	27
Reading Books	28
General Principles, 28. Need of Simplicity, 30. Adaptation to India, 32. The Government Resolution, 33. Review of English Reading Books, 34. Books published in England, 34. English Reading Books published in India, 36. Proposed New Series of Reading Books, 41. Elements of Reading, 41. Preservation of Health, 43. Agriculture and Manufactures, 46. Social Economy, 48. Natural Science, 52. Literature, 56. Moral Instruction, 57. Poetry and Music, 59. Arrangement of Subjects, 74.	
Grammar	75
Geography	76
Maps and Atlases, 78.	
History	80
Arithmetic and Practical Mathematics	83
Writing	86
Drawing	87
Singing	87
Illustrations	88

Page

School Apparatus 89

Standards 91

Necessity of Normal Schools 95

Imperial Series of School Books 98

Report on Education in India, 100; Procedure in England, 102; Final Report 103

Vernacular Editions 104

Prices of Books 104

Circulation of Books 105

Book Postage, 106.

Use of other Books 106

Periodical Revision 107

Conclusion 107

GOVERNMENT EDUCATION

IN

INDIA.

INTRODUCTION.

The education of an empire containing, with its allied Native States, 240 millions of inhabitants, is a topic that may well enkindle enthusiasm. And there are many advantages for carrying on the work. As the *Pall Mall Gazette* remarks:—

"It would probably be difficult to find any population so teachable and so much interested in receiving instruction as large sections of the natives of India. There is no population on earth so completely imbued with the doctrine that it is the duty of the ruler to govern, and that his order ought to be obeyed. On the other hand, there is not in the world a Government which more fully appreciates the importance of education than the Government of India. We have accordingly a Government ready and willing to teach, a people willing to be taught, and practically speaking, none of the disinclination to submit to authority which makes it nearly impossible to do any thing worth doing in many other parts of the world."

Though the Mahommedan College in Calcutta was established by Warren Hastings in 1781, and efforts for the promotion of education were subsequently made on a small scale by Government, it was not till the land attained "rest," that the subject was taken up earnestly. The Educational Despatch of 1854, marks a new era. Gratifying progress has already been made, but far more yet remains to be done. The education of the people is still one of the most important problems of the day.

It cannot be denied that the education of such an empire is fraught with momentous consequences. "Knowledge is power," but it may be used for evil as well as good. Unless controlled by moral principle, it may prove a curse—not a blessing.

Lord Northbrook said at the late Convocation of the Calcutta University:—

"To establish in this country, where there are so many different races and so many different religions, a system of education which

should unite them all in furthering the great object of the enlightenment and advancement of their fellow-countrymen was, I think, you will admit, a task of more than ordinary difficulty."

With regard to the future His Lordship remarked:—

"I have said that it would be bold indeed in me to venture to give any authoritative opinion upon the effects of the spread of education in India. I doubt whether any of those here present, however earnest they may be in the cause, could venture to prophesy what the effects of the spread of education in India may eventually be."

The Hon. H. S. Cunningham, in a recent address to educated Hindus in Madras, thus shows the terrible ordeal which they have to undergo:—

"The educational process, to which a young Hindu is often submitted, is one which would be perilous to the most robust moral nature. He is transferred at a single bound from the primitive simplicity of his childhood's creed to the full blaze of European science: he finds physical philosophy advancing torch in hand into the innermost and most sacred recesses of his nature, and providing him with a ready-made explanation of everything that was full of mystery, sentiment and awe. Nature is stripped of all her illusions, and, with them, of all her tenderness, majesty and romance. The legendary tale that charmed his childhood's ear becomes a revolting puerility; the simple philosophy that satisfied his boyhood's curiosity, an old wife's tale; the dread secrets of existence, a mere affair of muscle and tissue; the inward cravings and aspirations of the soul, the result of indigestion; religion an historical malady; prayer a curious relic of the fetish age; one philosopher traces his genealogy from a monkey, another points out a gland as what the superstitious call the soul. Between all his instructors, amidst the crash of shattered beliefs, and the babel of conflicting theories, the unfortunate neophyte acquires nothing tangible beyond a total disbelief in all existing creeds, and a profound disregard for an older, more credulous and less instructed generation. He throws the tattered rags of belief to the winds, hoists the flag of universal scepticism, and steers without any sort of moral compass, into the unknown ocean which stretches far before him. Who shall wonder if the first storm shatters his ill-found vessel, or if he speedily makes shipwreck on hidden shoal or rock?

"I have drawn what I trust is for the most part an exaggerated picture, but dangers of this species, though not always in this intense degree, unquestionably beset the Indian Student."

Babu Kesab Chunder Sen thus describes the immediate results of the contact between Western science and Eastern systems:—

"In times of transition, in India as elsewhere, we always find that men for a time become reckless. The old faith is gone, and no new faith is established in its place. Society is unhinged and unsettled, old principles of character and time-hallowed institutions are swept

away by innovations and revolutionary tumults, but no better principles are immediately established in their place. Thus for a season is confusion and recklessness. Such is the case in India at the present time."*

A. P. Howell, Esq., Under Secretary to the Government of India, Home Department, has for several years been charged with the general supervision of Government Education in India. The *Friend of India*† quotes the following from his last Report to Government:—

"In India, not only is there no religious teaching of any kind in Government schools, but even the aided schools under native managers are generally adopting the same principle. I believe this result was never anticipated, and I am sure it requires attention. Looking to the rapid growth of our educational system, and to the enormous influence for good or evil that a single able and well educated man may exercise in this country; and looking to the dense but inflammable ignorance of the millions around us, it seems a tremendous experiment for the State to undertake, and in some Provinces almost monopolize, the direct training of whole generations above their own creed, and above that sense of relation to another world upon which they base all their moral obligations; and the possible evil is obviously growing with the system. It is true that things go smoothly and quietly, but this is attained by ignoring not only the inevitable results of early training on the character and the great needs of human nature, especially in the East, but by also ignoring the responsibility which devolves on the Government that assumes the entire control of direct education at all. If, therefore, while fanaticism is raging around, there is a calm in our schools and colleges, it is an ominous and unnatural calm, of impossible continuance, the calm of the centre of the cyclone."

Political considerations will not check the efforts of the British Government to promote the education of the people of India. The noble language of Lord Metcalfe embodies the feelings of those intrusted with the destinies of the country:—

"The world is governed by an irresistible power which giveth and taketh away dominion, and vain would be the impotent prudence of man against the operations of its Almighty influence. All that rulers can do is to merit dominion by promoting the happiness of those under them. If we perform our duty in this respect, the gratitude of India, and the admiration of the world will accompany our name through all ages, whatever may be the revolutions of futurity."

Lord Northbrook, at the Calcutta University Convocation, quoted the words of the late Lord Mayo: "that whatever may be the effect of the spread of education in India, education was a chief duty of the Government, and that the Government went forward in their work without fear and hesitation."

* English Visit, p. 263. † March 6th, 1879.

The greatness of the work to be accomplished, its momentous consequences, and the resolution of Government to proceed with it, have been briefly noticed. The object of the following remarks is to endeavour to throw out some hints to increase the benefits and lessen the evils of the present system of Government education.

IMPROVEMENT OF SCHOOL BOOKS.

While Government seeks to extend education in India, it is at the same time desirous of improving the educational machinery. Matthew Arnold says that the following words of Wilhelm von Humboldt might be taken as a motto for his whole administration of public instruction in Prussia: "The thing is *not*, to let the schools and universities go on in a drowsy and impotent routine; the thing is, to raise the culture of the nation ever higher and higher by their means."*

Books form an important part of the educational machinery. Their influence is of no mean value.

"Give me," says one, "the songs of a country, and I will let any one else make its laws." "*Give me*," says another, "the school books of a country, and I will let any one else make both its songs and its laws."

A German writer remarks, "Whatever you would put into the life of a nation, put into its schools." The most effectual mode of accomplishing this is to put it into the *School Books*. They are read by the children when the memory is quick and retentive. Impressions are thus produced which remain through life.

An intelligent teacher, if compelled to use inferior class books, will make up largely for their deficiencies by oral instruction. In India, however, except in a few superior schools, as Mr. Hodgson Pratt, formerly Inspector of Schools in Bengal, observes, "The book is every thing, for the Master cannot supply what it fails to give."†

But even in the case of the best teachers, it is a great advantage to have good text-books. Oral instruction must be limited, and if the pupils can *read* as well as *hear*, the lessons will be doubly impressed upon the mind.

In England any information which it is desirable to place before the people can at once be made known by means of the public journals. Here the Native Press is yet in its infancy, and probably does not affect more than one per cent of the population. The country is gradually being covered with a net-work of schools, and an influence will be exerted by them which will permeate every corner of the empire.

---

* Selboda Inquiry Commission, vol. vi., p. 502.
† Bengal Public Instruction Report for 1856-57 App. A., p. 20.

Among other measures, the Despatch of 1854 urged the preparation of vernacular school books :—

"70. Equal in importance to the training of schoolmasters, is the provision of Vernacular School Books which shall provide European information to be the object of study in the lower classes of schools. Something has, no doubt, been done of late years toward this end, but more still remains to be done."

While the preparation of School Books has not been altogether neglected since the Despatch was written, the work cannot be said to have received the attention it deserves. Lord Northbrook, since his arrival in India, has visited Schools and Colleges in different parts of the country, himself questioning the students, and, in some cases, examining their written exercises. The following Resolution* embodies the views his Lordship has formed with regard to the text-books used in Government Schools :—

His Excellency the Governor-General in Council has lately found reason to believe that the attention of local Governments and Administrations might usefully be drawn towards the method upon which text-books are now compiled or chosen for public instruction in schools.

2. It is understood that these books belong to two classes :—

(i).—Those that are specially written or compiled for use in schools.

(ii).—Those that are selected out of general literature for study and examination in schools.

3. The question has been raised whether in either of these two classes, the books now used are altogether accordant with what appears to His Excellency in Council to be a sound principle of elementary education, namely, the contents of the book taught shall be as much as possible, within easy range of the pupil's comprehension and ordinary experience. His Excellency in Council believes that it is important to lay out the course of school teaching in India upon this principle. The introduction of books containing allusions to scenes or ideas which boys of this country cannot possibly realize or appreciate is not to hinder progress in mastering the language itself, which should be the main object of education at this stage; while examinations upon this kind of instruction must have a tendency towards favoring the practice of what is commonly called cramming, which in the training of schools is is particularly expedient to discourage.

For while the more advanced student may be required rapidly to acquaint himself with a variety of new ideas and of references to things which open out fresh lines of thought or points of view, to the schoolboy all facts that are above his head, or beyond his experience, are a set of isolated expressions, carrying no meaning and raising no associations. The consequence is that he must usually learn such things by rote and

* Proceedings of the Government of India in the Home Department, (Education) No 143, dated Fort William, the 29th March, 1872.

must fill his head with them unprofitably by the mere effort of memory; as when for instance he is put to read or is questioned in extracts from pieces of English poetry, full of classical metaphors and allusions to European history; or when he is taken through a chapter from an English novel of social life.

4. His Excellency would therefore shape the course of text-books more closely towards their main object—elementary knowledge of the language in which they are written, coupled with useful instruction in common things; he would largely substitute familiar for foreign subjects, and in examinations he would avoid testing a boy's capacity to retain and repeat what cannot yet be of use to him.

His Excellency is not unmindful of the exertions which at various times and in different provinces have already been made to supply the demand for proper school books in India, and to deal with the difficulties that underlie the salient points here only touched upon. The Madras School-Book Society not only did much in this field up to 1864, but afterwards projected a scheme for providing a vernacular literature to educated adults. Mr. H. Reid, while Director of Public Instruction in the North Western Provinces, did a great deal with his coadjutors towards the editing and arrangement of school books; and the services rendered to education by Mr. J. L. Murdoch, LL.D., are known to the Supreme Government. The question has been kept in view by other Administrations, and the Lieutenant-Governor of the Punjab in his review of the educational report for 1871-72 desired most careful attention to the improvement of existing text-books, observing that improvement was very much needed. His Excellency in Council however considers that more general revision of the books used in all the courses of public teaching is still expedient and in some respects even necessary.

6. For this purpose it has been determined that all Local Governments and Administrations shall be requested to appoint Committees to examine and report upon the class books that are now prescribed in all those schools which receive any formal support from the State in order to discover defects either in form or substance, and to adapt more carefully the course of authorized reading to the general educational policy. Whether prizes might not be offered for sound and suitable elementary school books if such are found to be wanting, is a suggestion which the Committees will no doubt consider in its place.

7. A report upon the conclusions adopted by these Committees, and upon the steps thereupon taken, should be submitted hereafter to His Excellency in Council.

Now that the subject of text-books is under consideration, the best opportunity is afforded to any persons who wish to make suggestions to the Committees appointed.

In ventering to offer some remarks, the writer is not taking up a question new to him. For upwards of thirty years he has been more or less connected with education at home or in the East. He has examined numerous schools in India, from Peshawar to

Cape Comorin, and from Moulmain to Kurrachee. He has visited every country in Europe noted for its educational system, as well as crossed the Atlantic, to ascertain what improvements might be introduced with advantage in India. To School Books he has paid special attention.

The subject under consideration would require a large volume for its adequate discussion; but only some general remarks can be offered. The writer bears cheerful testimony to the gradual improvement in Indian School Books. Still, it is no depreciation of them to say that, were the great resources at the command of the Government of India rightly employed, text-books might be prepared as much superior to any at present in use as the Martini rifle is to the "Brown Bess" of former days.

AIMS OF GOVERNMENT EDUCATION.

Before considering the modifications in School Books which are desirable, it is important to understand clearly the ends contemplated by Government in promoting Education in India. These may best be shown by extracts from the Despatch of 1854:—

"2. Among many subjects of importance, none can have a stronger claim to our attention than that of education. It is one of our most sacred duties to be the means, as far as in us lies, of conferring upon the natives of India those vast moral and material blessings which flow from the general diffusion of useful knowledge, and which India may, under providence, derive from her connexion with England.

"3. We have, moreover, always looked upon the encouragement of education as peculiarly important, because calculated 'not only to produce a higher degree of intellectual fitness, but to raise the moral character of those who partake of its advantages, and so to supply you with servants to whose probity you may, with increased confidence, commit offices of trust' in India, where the well-being of the people is so intimately connected with the trustfulness and ability of officers of every grade in all Departments of the State."

The above may be summed up as follows:—

The aims of Government education are,

1. To promote the temporal well-being of the people of India;
2. To elevate them intellectually;
3. To raise their moral character.

No course of education can be considered complete which does not combine these three objects, though different importance will be attached to each by different persons. They may be briefly examined in turn, as a clear understanding of them is necessary in future remarks. It is true that, to some extent, they are so

connected, that certain means tend to secure them all. Still, they may be considered separately. General principles will first be noticed; details will afterwards receive attention.

I.—PROMOTION OF THE TEMPORAL WELL-BEING OF THE PEOPLE.

The following means may be employed to secure this object:—

1. **Teaching to read, write, and cipher.**—Everywhere, an educated man has advantages over the ignorant in the race of life. Professor Huxley says that "getting on" is "the English conception of Paradise."* This is the great aim of English parents in sending their children to school. Even in Germany, University professors "are constantly warning their pupils against *Brodstudien*, studies pursued with a view to examinations and posts."† It is reasonable to expect that parents in India should have similar motives. The writer was once present when "Nineveh Layard" visited an English Institution in Calcutta. When he asked a lad what brought him there to study, he frankly replied that it was for the sake of his stomach!

With regard to Vernacular Schools in Bengal, Mr. Woodrow says the boys are sent "to learn to write and to keep accounts. It is quite a matter of indifference to their parents whether they are taught to read or to understand what they read. The understanding what is read is supposed to come of itself in after life."‡

With parents of higher position, the wish, says a Madras Report, is that their children may learn English as the supposed "surest passport to official employment." "The knowledge that is to be conveyed through the medium of a language is with them a very secondary consideration"§ The feeling is the same in Bengal. Mr. Woodrow remarks:—

"In theory, and to some extent in practice also, the Anglo-Vernacular School teaches English as a language only, and all other branches of learning in the vernacular. This plan has been supported by the whole weight of the authority of the Educational Department, but it is excessively unpopular. All the managers of all the Anglo-Vernacular Schools hate the rule, and strive to evade it, or to violate it whenever they can. They send their sons to school solely to learn English; they wish them to speak English as much as possible, and they grudge every hour in which instruction is imparted in the verna-

* Lay Sermons, p. 62.

† Quoted in Quick's Essays on General Education, p. 20.

‡ Bengal Public Instruction Report, 1857-58, Ap. A., p. 48. During the writer's visits to vernacular schools under native management, he has sometimes heard children repeat English poetry of which they did not understand a single word. The fact that it was unintelligible to the children, seemed of no consequence.

§ Madras Public Instruction Report, 1856-57, pp. 23, 24.

cular language. Hence all the time given to History, Geography, Arithmetic, and Bengalee is considered time wasted!"*

European managers of Schools, in many cases, have not sufficiently consulted the wishes of the people in the course of instruction. Home models, formed on abstract principles, have been followed. The late Mr. Gover says:—

"A low class school on the English fashion and of the official pattern, omits very much the natives justly count valuable, and especially contains no machinery for teaching such necessary things as native accounts, petitions, letters, and other concerns of ordinary daily life. On the other hand, it teaches arithmetic in better fashion. It almost universally neglects writing, or separates it from reading and composition, but is superior in geography."†

Some branches which the people esteem greatly are not taught, while in lieu of them they receive geography which they regard as useless. This is one reason why in Mission Vernacular Schools in Madras one anna a month can with difficulty be obtained from the pupils, while the average fee in native schools is six annas. In teaching reading and arithmetic, the aim should be to adopt every thing valuable in native methods, adding to them whatever western experience may dictate.

2. **Instruction in the Laws of Health.**—H. Spencer says, "As remarks a suggestive writer, the first requisite to success in life 'is to be a good animal;' and to be a nation of good animals is the first condition to national prosperity." Even in England there is still lamentable ignorance among the masses with regard to the simplest principles of sanitary science. Professor Huxley remarks, "If any one is interested in the laws of health, it is the poor workman, whose strength is wasted by ill-prepared food, whose health is sapped by bad ventilation and bad drainage, and half whose children are massacred by disorders which might be prevented."‡ Much more is such information necessary in India. Efforts are now being made by Government to enforce sanitary regulations. Next to the imposition of *new* taxes, these are perhaps what the people most dislike in our rule. They are looked upon as arbitrary freaks, or part of that "eternal hurry-scurry"§ in which Englishmen delight, to be evaded wherever it

* Bengal Public Instruction Report, 1860-61, Ap. A., p. 31.
† Report on Madras Educational Census, 1871, p. 21.
‡ Lay Sermons, p. 43.
§ A phrase used by a native paper. It is amusing to read the contradictory sentiments put upon our conduct by the people. Sir George Campbell has, very properly, sought to improve the physique of the Bengalis. The *Hindu Patriot* has the following reflections on the subject:—

"All the pupils of Berhampore College spend the afternoon in wrestling and other gymnastic exercises. They then return to their homes and eat a little, then go

can be done with safety. Simple lessons in Reading Books would show the object of such rules, and tend to secure the willing co-operation of the people. Many years ago the late Sir J. K. Shuttleworth, in an admirable letter on the "Education of the Coloured Races in the British Colonies," recommended that they should be taught "how health may be preserved by proper diet, cleanliness, ventilation, and clothing, and by the structure of their dwellings."

In Massachusetts the following Act was passed in 1860:—

"1. Physiology and hygiene shall hereafter be taught in all the public schools of the Commonwealth, in all cases in which the school committee shall deem it expedient.

"2. All school teachers shall hereafter be examined in their knowledge of the elementary principles of physiology and hygiene and their ability to give instruction in the same."*

The last Madras Public Instruction Report contains the following:—

"Some knowledge too of the laws of health, apart from its importance to the individual himself, seems very desirable among men who, as members of Municipal and Local Fund Boards, are expected to discuss and decide on sanitary measures, and who ought to be our main instruments for spreading some idea of the advantages of such measures among their countrymen."

3. **Diffusing knowledge fitted to improve Agriculture and the Arts.**—Some parts of India are densely peopled, and the population is pressing upon the means of subsistence. Every practicable appliance by which the fertility of the soil may be increased, is of great importance. Improved agriculture has probably doubled the produce at home during the last half century. It seems possible to make a considerable advance in India.

There are also special reasons for directing effort in this line. As already noticed, there is everywhere a strong craving for a knowledge of English, as the pathway to office, honour and wealth. Even peons not unfrequently struggle hard to give at least one son a fair English education in the hope that he may eventually rise to a high position. The number of applicants for places under Government is far in excess of the demand.

The following extract from a Bengali newspaper shows that some are beginning to realize the actual state of things:—

"The great question which English journals are now discussing regarding the possible future of the numerous young men of promise

down and sleep like dead people until morning, when they wake up with stiff limbs. The time for reading is wasted in this way. Chota Sriguru (Lieutenant Governor) is not wanting in artifices. He has devised many methods to "eat the head" of the higher Bengali learning; though this may not be his design, this is the fruit which will result." Quoted in *Indu's Mirror*, 1st May, 1873.

* Quoted in Report of Committee of Council on Education 1862-63 p. 207.

whom the universities are annually disgorging from their classical throats bids fair to be ere long the most perplexing problem of Indian politics. How are our B. As and M. As, not to speak of the undergraduates and other small fry, to be decently fed and clothed. The public service with its ten thousand nooks and corners is filled to overflowing, the houses of private enterprise are also similarly crammed, the markets are overstocked and the trades offer no refuge. What are these young men with their grammar and lexicon, their hard-earned degrees and literary honors, to do? Where are they to work with the distinction which has separated them from the common herd? Some field of enterprise beyond the limits of the country, some outlet so to speak from its overstocked markets and teeming offices seems imperatively demanded by the rapid progress of education in the country." *Bengal Christian Herald, 9th May, 1873.*

It would be useful to insert in Reading Books, in a suitable form, advice like the following: Sir Richard Temple, when addressing in 1870 the students of the Free Church Institution, Calcutta, said:—

"Then I must entreat you not to look too much to Government appointments as constituting the one great end of educational life. Doubtless the Government will always do, as it has heretofore done, all it fairly can for you in these respects. But you should try to strike out paths for yourselves, and to seek for non-official employment. You cannot all enter the public service; you cannot all rise to good positions."*

The Hon. J. B. Norton urged the same course in Madras:—

"I can perhaps scarcely expect that the young persons I see around me can fully appreciate the truths which I have been telling them; and therefore, Mr. President, I address myself more particularly to you and the more advanced in age of those who now hear me; and I tell you that this reliance upon Government, and seeking after its employ, to the exclusion of all other legitimate and honourable means of procuring a livelihood, has up to the present moment been the principal bane and curse of Native Society."

At the last Calcutta University Convocation Lord Northbrook remarked:—

"I cannot help noticing in this country how some professions which in England are filled by some of the ablest men in the highest ranks of society, appear in India, not to be looked to as professions in which educated men and graduates of the university can properly be employed.

"I look to the fine arts, and I look to commerce in which a large portion of the educated men in England obtain their positions in life, and I see that in India those professions are not valued so much as they should be by those who have gone through a university course. I, however, look forward to the time, which, in this city at any rate, is

* Report of the Bengal Mission of the Free Church of Scotland for 1870, p. 84.

rapidly approaching, when the customs which at present prevent educated men of the higher ranks of society from entering such professions will be regarded as things of the past."

While advice like the above is especially required in advanced classes, lessons may be given even in village schools highly calculated to promote the future temporal well-being of the pupils.

4. **Instruction in Social Economy.***—The Education Commission, 1861, remarked:—

"Next to religion, the knowledge most important to a labouring man is that of the causes which regulate the amount of his wages, the hours of his work, the regularity of his employment, and the prices of what he consumes."†

The Schools Inquiry Commission took a somewhat similar view:—

"Before leaving those which we have called the human subjects of study we must not omit to mention Political Economy. The need of teaching this was pressed with the greatest earnestness, and with very weighty arguments, by Mr. Ellis and several others. It is undeniable that it bears directly on the conduct of life, and that in practical applications few studies can surpass it. It may be made exceedingly interesting. It supplies excellent examples of reasoning. In the hands of a thoroughly skilful teacher, it can be brought within the comprehension of boys at school. It would not take much time, and ought certainly to form a part of a good educational programme."‡

The London and Liverpool School Boards have determined to make elementary social economy an "essential subject in all the schools which they provide, and their example will not improbably be followed by other school boards."§

Some knowledge of this science is very important in India. "An ignorant impatience of taxation" is not peculiar to this country; but the people have little idea of Government beyond a despotic power, that takes all it can out of them and does as little for them as possible. The headman of a village who can defraud Government of its rights in the way of taxes, is considered worthy of being held in everlasting remembrance.

The people have no clear views as to how the price of grain is determined. High rates are put down very largely to combinations among the grain dealers. This, of course, is true to some extent; but the laws which regulate prices should be explained.

The last Madras Public Instruction Report has the following remarks:—

"I also agree with Dr. Murdoch in considering that Political

* Political Economy is intended.

† Report, p. 127. ‡ Report, pp. 28 29.

§ Report of Royal Commission on Scientific Instruction, p. xxvi.

Economy is very unwisely ignored in our scheme. The recent imposition of new taxes, the general rise in the prices of the necessaries of life, and the frequent occurrence of dearths and famines seem to render it necessary that sound elementary notions on this class of topics should be diffused throughout the country. The history of Trades' Unions in England and of Communism in France shows how much danger may lurk in hazy notions of the relative rights of labour and capital, and seems to indicate that Political Economy, which especially concerns the masses, should be taught to the masses, if not in their own interests at least in the interests of society at large. The subject enters at present into one of the optional branches of the M. A. course, and the propriety of making it a part of a collegiate, much less of a school course, will certainly not be generally admitted. I have always thought that some elementary notions on the subject might very well be diffused through the medium of books modelled on the plan of Archbishop Whately's Easy Lessons on Money Matters and Miss Martineau's Tales, and it may be remarked, that Mr. Arbuthnot, when Director of Public Instruction, prescribed a translation of the former as a text-book for the fifth class of our Tarqq Schools. This part of the scheme, however, if it was ever carried out, seems to have fallen into abeyance."

By the employment of the means above mentioned, education may be made instrumental in promoting the temporal well-being of its recipients.

II. The Intellectual Elevation of the People.

The discipline of the intellectual powers is a most important part of education. At home, until recently, in schools of a higher grade, this was sought to be attained chiefly through the study of the classical languages of Europe.

Gentlemen connected with the Educational Department in India naturally introduced the system under which they had themselves been trained. Shakespeare and Milton were, however, substituted for Horace and Virgil. The influence of Cambridge secured the study of pure mathematics, but physical science was, in most parts of the country, greatly neglected.

During the last few years, the study of Latin has been encouraged to some extent in Western India.* A Bombay native paper mentions that some of the educated Hindus look down with additional contempt upon the mass of their countrymen, not only on account of their ignorance of Shakespeare and Milton, but because they have never studied Cæsar!

---

* An illustration of the tendency of educationists to get into a rut, is given in the last Punjab Public Instruction Report:—

"A short time ago the Lieutenant Governor visiting the Montgomery Jail, found the prisoners, wild Jats and Khurrals of the Bár, learning Persian, a language as foreign and as useless to them as Greek. The Inspector who accom-

Public opinion on the higher education has changed a good deal at home of late years. Mr. Lowe remarked in his speech at Edinburgh :—

"Now I pass on to the other study that is the principal occupation of our youth, and that is the study of the Latin and Greek languages, and the history, science, geography, and mythology connected with them—the principal study being language and the rest only accessories to it. Now, it strikes one, in the first instance, it is rather a narrow view of education that it should be devoted mainly—I had almost said exclusively—to the acquisition of any language whatever. Language is the vehicle of thought, and where thought and knowledge are present, it is desirable as the means of conveying it. It is not a thing to be substituted for it—it is not its equivalent. It supposes knowledge of things, and it is only useful when that knowledge is attained for the purpose, namely, of communicating it. I will venture to read a few lines from Pope in illustration of what I say; I should only weaken the thought if I attempted to state the effect of them. They are 140 or 150 years old, and that only shows you how abuses and mistakes may be pointed out in the most vigorous language, and with the most conclusive reasoning, and yet they may remain utterly uncared for :—

> "Since man from beasts by words is known,
> Words are man's province; words we teach alone.
> When reason doubtful, like the Samian letter
> Points him two ways; the narrower is the better.
> Placed at the door of learning youth to guide,
> We never suffer it to stand too wide,
> To ask, to guess, to know, as they commence,
> As fancy opens the quick springs of sense,
> We ply the memory, we load the brain,
> Bind rebel wit, and double chain on chain,
> Confine the thought, to exercise the breath,
> And keep them in the pale of words till death."

It is objected however that Greek and Latin are studied, not for the knowledge they contain, but for the mental discipline. This, no doubt, is valuable, but the question is, can this not be secured by other means? Herbert Spencer says :—

"We have now to judge the relative values of different kinds of knowledge for purposes of discipline. This division of our subject we are obliged to treat with comparative brevity; and happily, no very lengthened treatment of it is needed. Having found out what is best for the one end, we have by implication found what is best for the other. We may be quite sure that the acquirement of those classes of facts which are most useful for regulating conduct involves a mental exercise, best fitted for strengthening the faculties. It would be utterly contrary to the beautiful economy of Nature, if one kind of culture

passed him did not think the study inappropriate. It was the regular course of the Department, and prisoners had to pass through it in the same way as all other scholars, whether the study was useful to them or not." p. 19.

were needed for the gaining of information and another kind needed as a mental gymnastic. Everywhere throughout creation we find faculties developed through the performance of those functions which it is their office to perform; not through the performance of artificial exercises devised to fit them for their functions."*

The British Association, at its meeting in 1867, gave the following reasons for including some training in science in general education in schools:—

"As providing the best discipline in observation and collection of facts, in the combination of inductive with deductive reasoning, and in accuracy both of thought and language.

"Because it is found in practice to remedy some of the defects of the ordinary school education. Many boys, on whom the ordinary school studies produce very slight effect, are stimulated and improved by instruction in science; and it is found to be a most valuable element in the education of those who show special aptitude for literary culture.

"Because the methods and results of science have so profoundly affected all the philosophical thought of the age, that an educated man is under a very great disadvantage if he is unacquainted with them.

"Because very great intellectual pleasure is derived in after life from even a moderate acquaintance with science.

"On grounds of practical utility as materially affecting the present position and future progress of civilization."†

The Royal Commission on Scientific Instruction thus answer the objection that there is no time for such studies:—

"21. We do not wish to underrate, in any way, the necessity of careful instruction in reading, writing, and arithmetic, as the very foundation of education; but we do not believe that the introduction of extra subjects would in any way interfere with it. Mr. Lingen, then Secretary to the Committee of Council on Education, stated before Mr. Samuelson's Committee on Scientific Instruction, in answer to Mr. Dixon, that those schools in which extra subjects are introduced are most successful in teaching reading and writing; and Mr. Moseley, in his Report on the King's Somborne School, expressed it as his opinion that the slowness with which children in our elementary schools learn to read is in some degree to be attributed to the unwise concentration of the labours of the school on so few subjects: with these opinions we are disposed to concur."

The following are some of the "General Observations" of the Commission:—

"24. From a consideration of the evidence we are of opinion that instruction in the elements of natural science can be, and eventually ought to be, made an essential part of the course of instruction in every elementary school.

* What Knowledge is of most Worth?

† Reprinted in Schools Inquiry Commission, Vol. II., p. 219.

"25. The instruction to which we refer, though scientific in substance, should, in form, be deprived of needless technicality, and should be almost wholly confined to such facts as can be brought under the direct observation of the scholar. It should, in fact, be conveyed by object lessons, so arranged and methodised as to give an intelligent idea of those more prominent phenomena which lie around every child, and which he is apt to pass by without notice.

"26. A course of object lessons of the nature here indicated could be given even to the junior classes of elementary schools, not only without in any way interfering with the efficiency of other instruction, but with the effect of aiding the general development of the intelligence of the children; and similar advantages would attend teaching of a like kind, but of a somewhat more advanced character, in the senior classes."

"The scientific instruction thus afforded would, within the narrow limits to which it extends, give a sound acquaintance with the elements of physical science." Report, p. xvi.

The objection is frequently brought forward that teachers are incapable of giving lessons in science. The Royal Commissioners say:—

"We have the evidence of highly competent authorities to show that the scientific instruction which was given by ordinary elementary school teachers, before the introduction of the Revised Code of 1861, was, in many instances, sound and valuable in itself and beneficial to the pupils." p. xii.

The want of apparatus is thus noticed by Professor Tyndall:—

"I would here remark that although no scheme of education in physics is even approximately complete without illustrative experiments, an able teacher, even in the absence of apparatus, can do a great amount of good. It is possible, by the judicious use of the blackboard and chalk, and of simple models, to convey clear conceptions of various parts of physics, so clear, indeed, that, should the pupil afterwards witness the experiments, he shall witness that of which he had previously an accurate, though, it may be, an incomplete conception. Indeed, even when apparatus exists, the performance of experiments ought to go hand in hand with this diagrammatic exposition." *

The London School Board has made instruction in elementary physical science an essential subject in all its schools. The course is to be:—

"Systematised object lessons, embracing, in the six school years, a course of elementary instruction in physical science, and serving as an introduction to the science examinations which are conducted by the Science and Art Department." †

Dr. Duff lightly characterises the Hindu mind as "subjective and metaphysical," apt to indulge in "dreamy abstractions and

* Appendix, vii., p. 53.
† Quoted in Royal Commission Report, p. xvii.

intangible profitless speculations."* The value of science as a corrective will at once be apparent.

There have been several protests against the neglect of science in India. Many years ago the Bengal Council of Education remarked :—

"The want of every thing of a practical character in the educational course at present appears to the Council to be its greatest defect. Every thing that strikes the senses, one-half of the whole circle of knowledge is, as it were, ignored in our present scheme of education. This, the Council incline to think, would be a grave defect in any country, but they cannot doubt it is so in India."

In 1853, the present Lieutenant-Governor of Bengal observed :—"With respect to the quality of Government education, the great mistake seems to be the preference of English literature to science."†

In the Bengal Public Instruction Report for 1856-57, Mr. Hodgson Pratt, then Inspector of Schools, said :—

"We have so long given exclusive importance to Classics and Mathematics, that the young Baboos regard the Physical Sciences with contempt. There could not be stronger evidence of the defects of our past system. If there is one thing more than another which (religion apart) educationists ought to strive for in this country, it is to awaken these 'books in chudders,' as they have been wisely and wittily called, to the 'pleasures and advantages of Science.' To encourage them to pursue Classics and Mathematics to the exclusion of every thing else, is to perpetuate the very faults which especially distinguish the mental character of the so-called educated classes.

"I know that all suggestions of this kind are met by a cry, that we are going to substitute a smattering of every thing for a knowledge of two or three things; but it is worth enquiring whether we have not been teaching many things of little or no use whatever. I would ask why should Greesheemunder Chuckerbutty be expected to know 'what circumstances enabled Shakespeare to exhibit an accurate knowledge of Greek Mythology,' or 'in what respect the Dramatic compositions called 'Mysteries' differ from those called 'Moralities,' and other facts of a like nature? On the other hand, it is of very great importance, that he should see clearly the danger of living with an open sewer running under the lower floor of his house, or the cruelty of marrying his children at an immature age, or the impolicy of exhausting the soil of his fields by the disregard of important principles in Chemistry; and it is very important that his mind should comprehend the sublimity and beauty of the laws by which his own body and every thing around him are governed; and that his heart should, if possible, be awakened to the great facts and conclusions of Natural Theology."‡

* Quoted in Calcutta Review, Vol. xii., p. 511.

† "India as it may be," p. 103.

‡ Bengal Public Instruction Report, 1856-57, Ap. A., pp. 2, 3.

Some progress has been made in securing a place for physical science in education except in South India. A graduate of the Madras University may be totally ignorant of Natural Science. It is not taken up at all before the B. A. Examination, and it is then only one of the optional subjects, probably rarely selected. The last Madras Public Instruction Report remarks :—

"The practical exclusion of the natural sciences from our course seems also much to be regretted. The most eminent thinkers are coming to the conclusion that the neglect of them in Europe has been a grievous error. The intellectual discipline which the experimental sciences are calculated to afford would be particularly valuable in correcting the dreamy and impractical turn of mind which characterizes the Hindu student."

The Bombay Matriculation Examination requires an elementary knowledge of the following :—

(a.) The mechanical powers.

(b.) The laws of chemical combination, the chemistry of air and water, and the phenomena of combustion.

(c.) The solar system.

Sir George Campbell has given a considerable impulse to the study of science in Bengal. Last year, the Hon. Mr. Markby, seconded by Baba Rajendra Lala Mitra, proposed in the Senate of the Calcutta University, that "a short and easy course of physical science may be adopted in the schools." The motion was lost at the time; but optional scientific subjects have since been introduced into the University course.

While there is a great deal of mere "cramming" in English Schools in India, the want of mental discipline is far more felt in the indigenous schools. Adam says of the teachers in Bengal :—

"At present they produce chiefly a mechanical effect upon the intellect of their pupils which is worked upon and chiseled out, and that in a very rough style, but which remains nearly passive in their hands, and is seldom taught or encouraged to put forth its self-acting and self-judging capacities."*

A. D. Campbell, Esq., Collector of Bellary, in his Report to Sir T. Munro, thus estimated the instruction given in Native Schools in his district :—

"Few teachers can explain, and still fewer scholars understand the purport of the numerous books they learn to repeat from memory. Every school boy can repeat verbatim a vast number of verses, of the meaning of which he knows no more than the parrot which has been taught to utter certain words. Accordingly from studies in which he

* Vernacular Education in Bengal, p. 93.

has spent many a day of laborious but fruitless toil, the native scholar gains no improvement, except the exercise of memory, and the power to read and write on the common business of life. He makes no addition to his stock of useful knowledge and acquires no moral impressions. He has spent his youth in reading syllables, not words, and on entering into life he meets with hundreds and thousands of words, of the meaning of which he cannot form even the most distant conjecture."

The late Director of Public Instruction remarks, after quoting the above, "The foregoing picture, it is to be feared, is still applicable to the quality of the instruction imparted in a large proportion of the present native schools."*

The Director of Public Instruction, Oudh, says of indigenous schools in his last Report, (p. 3) "They teach him as a rule merely to read certain books by rote."

Mill, in noticing "the great controversy of the present day with regard to higher education"—whether it should be literary or scientific, says:—

"I can only reply by the question, why not both? Can any thing deserve the name of a good education which does not include literature and science too? If there were no more to be said than that scientific education teaches us to think, and literary education to express our thoughts, do we not require both? and is not any one a poor, maimed, lopsided fragment of humanity who is deficient in either?"

The above expresses the true conclusion. Neither literature nor science should be neglected. Each is important in its place. The claims of science have been advocated under this head, only because, as a rule, attention has been chiefly given to literature.

III. THE MORAL IMPROVEMENT OF THE PEOPLE.

Kerr, in his Review of Public Instruction in the Bengal Presidency, says:—

"The Court of Directors from an early period considered that the improvement of the moral character of the natives was one of the first objects to be aimed at, and directed that a Professor should be appointed to lecture on Jurisprudence and Morals, without having any other duty to perform." p. 62.

As this was not carried out, Mr. Cameron, in 1840, wrote a Minute on the subject, containing the following passage:—

"In most countries Morality is taught as part of Religion. Here we are prevented by the circumstances of the country from teaching Morality in that manner. It is, therefore, more incumbent upon us than upon other ministries of public instruction to teach Morality in the form of Moral Philosophy." Kerr, p. 62.

The same great duty is recognized in the Despatch of 1854.

* Selections from the Records of the Madras Government, No. II, p. 9.

It is stated that one object of Government Education in India is to "raise the moral character of those who partake of its advantages."

It must be admitted that even at home this most important part of education is greatly neglected. The Report of the Education Commission in 1861, quotes the following:—

"Teachers are, from the very nature of the case, under a temptation to prepare their scholars mainly with a view to make a good show at the inspector's visit, and though I believe that very few are guilty of yielding to this temptation in an extravagant degree, yet I think that many fail to appreciate the importance of *adapting* the subject-matter of their lessons to the moral and social necessities of their pupils." p. 232.

The evil has been greatly aggravated of late years by the system of payment by results. An Inspector says:—

"Indeed the tendency of the New Code is to cause the managers and teachers to regard simply the pecuniary grants, and all that does not tend to produce an increased result as to these is hardly taken into the account. For one manager that asks me if his school is getting on well, there are 20 who now say, 'How much shall we get?' and the expression on a child's failure to pass any subject is not regret at his ignorance so much as indignation at his stupidity and the consequent loss."*

In India, the intense competition caused by the University Examinations, tends, both on the part of teachers and students, to make "passing" the grand aim in education.

The following extracts from Adam's Report on Vernacular Education in Bengal and Behar, show the neglect of moral teaching in native schools:—

"As to any influence of the teachers over the pupils—any attempt to form the sentiments and habits, and to control and guide the passions and emotions,—such a notion never enters into their conceptions, and the formation of the moral character of the young is consequently wholly left to the influence of the casual associations amidst which they are placed, without any endeavour to modify or direct them." p. 94.

"A higher intellectual cultivation, however, is not all that is required. That to be beneficial to the individual and to society must be accompanied by the cultivation of the moral sentiments and habits. Here the native system presents a perfect blank. The hand, the eye, the ear, are employed; the memory is a good deal exercised; the judgment is not wholly neglected; and the religious sentiment is early and perseveringly cherished, however misdirected. But the passions and affections are allowed to grow up wild without any thought of pruning their luxuriances or directing their exercise to good purposes. Hence I am

* Report of the Committee of Council on Education, 1864-65, p. 114.

inclined to believe, the infrequency in native society of enlarged views of moral and social obligation, and hence the corresponding radical defect of the native character which appears to be that of a narrow and contracted selfishness, naturally arising from the fact that the young mind is seldom, if ever, taught to look for the means of its own happiness and improvement in the indulgence of benevolent feelings, and the performance of benevolent acts to those who are beyond a certain pale. The radical defect of the system of elementary instruction seems to explain the radical defect of the native character; and if I have rightly estimated cause and effect, it follows that no material improvement of the native character can be expected, and no improvement whatever of the system of elementary education will be sufficient, without a larger infusion into it of moral instruction that shall always connect in the mind of the pupil, with the knowledge which he acquires, some useful purpose, to which it may be and ought to be applied, not necessarily productive of personal gain or advantage to himself." p. 101.

Several years ago, the orientalist, Dr. E. Roer, when Inspector of Schools in Bengal, thus urged the importance of systematic instruction in morality :—

"I take this opportunity of expressing my sentiments on another important question, viz., whether our present vernacular schools fulfil the object of giving a sound education to the people. A sound education would imply that the pupils are not only trained in their mental, but also, and more especially so, in their moral faculties, in such a way that they should know the duties which they have to perform in after-life, duties towards their Creator and their fellow-men, individually as well as to the State whose protection they are enjoying. Now, if there be a duty on the part of the State of imparting education to the people, as has so often been asserted, this duty refers to moral instruction; for, in order to obey the laws of the country, every one subject to their rule ought to know them, and the consequences arising to him from acting or not acting in accordance with them. No question our schools afford a much better mental instruction than the indigenous schools. But, in a moral point of view, I see no great difference between them. A knowledge of geography, &c., may destroy prejudices opposed to higher enlightenment, and in such books as *Nîti-bodh* (a translation of Chambers' Moral Class Book) some good moral lessons may be imparted; but, unconnected as these lessons are and not rising to principles, they can be considered merely auxiliary to moral instruction. In fact, no provision is made to implant in the minds of the pupils a consciousness of duty or a reverential feeling towards the laws of the country."*

One of the most intelligent Native Inspectors in India, Babu Bhudeb Mukerji, referring to the Government vernacular

* Bengal Public Instruction Report, 1857-58, Ap. A., p. 126.

2317

teachers employed in Bengal after a year's training, says of the education they give:—

"Practically they mean nothing more by it than teaching their pupils a little to read and write and to cast accounts also. This duty, I have no doubt, they discharge full vigorously, but beyond this, they do very little. The real training of their boys they neglect, if not entirely, for that is impossible under the present system, at least to a very serious extent. This is the more to be regretted, as many of their pupils are not likely to receive any other training at all. There are many causes that conspire to produce this highly culpable neglect in the tutors, but I shall mention here three only:—1st, That they come out from the training schools not sufficiently impressed with the importance of moral education; 2nd, That this sort of education is not in favour with the people, or rather there is no demand for it among them; and 3rd, what though last is not the least, that cramming which has now become the order of the day from the University down to these patshalas, does not leave room enough for education properly so called."*

Even in Government Schools of a higher grade, there seems to be often the same neglect. Mr. Beverley, C. S., Secretary of the Monghyr School, recorded the following remarks in the Visit Book on leaving the station:—

"It is much to be wished that the masters could be induced to entertain a loftier idea of their work, and that their heart and soul were wholly devoted to teaching. They should remember the great responsibility which rests upon them, the great influence for good or for evil which they possess in having charge of so many youths' minds and morals committed to them just at a time when both receive impressions so easily from without. The boys they are now educating will take the lead in native society in the next generation, and the tone of that society will depend altogether on the education they receive and the tastes they imbibe at the Government Schools. The masters will then see that it is a moral as well as an intellectual training they are called upon to bestow. This, I fear, is but too often forgotten. It is considered sufficient to instil a certain amount of knowledge into the boy's mind or memory, as the case may be, so that he may pass a fair examination, and the visitor's approval may be extended to the masters. But this is not sufficient. Religious books are forbidden, and very properly, to be taught in the school, but the prohibition does not extend to morality. The two must not be considered as identical. A man may be highly moral without being religious, but no one can be really religious without being moral. Moreover, morality, to some extent, more or less, is the ground work of every system of religion. There is every reason, therefore, why the greatest care and attention should be devoted to this branch of education, and the results, though not so manifest, are in every respect superior. The master who has

* Bengal Public Instruction Report, 1864-65, Ap. A., p. 46).

taught one pupil to scorn a lie, has done more for his own credit and more for the renovation of India than if he had passed twenty boys at the entrance examination, but given them no moral training besides. . . .

"The present masters, I regret to say, have no idea of teaching morality; they hardly know what it means themselves. I would make an exception in the case of the second master, but unfortunately he has not the art of inculcating the practice of it in others."*

The Madras Public Instruction Report for 1871-72 says:—

"Religion is necessarily banished from our schools. Ethics have hitherto been taught only in the B. A. course, and from the year 1874 Moral Philosophy is to disappear altogether except as an optional subject. . . . It does seem to be a mistake to banish from our schools and colleges, in a country in which the public code of morality is often essentially false, all systematic instruction in that science which 'teaches men their duty and the reasons of it.'"

The *Indian Mirror*, in noticing Lord Northbrook's speech at the convocation of the Calcutta University, urges the importance of moral instruction, and states one reason why frequently it is not given:—

"There is only another point to which we should invite His Excellency's attention. We mean moral training. On its importance it is unnecessary to expatiate. It is indeed to be regretted that there never was even a passing allusion to this subject in the utterances of any of the Vice-Chancellors or Chancellors of the University. But Lord Northbrook, as the head of the Government, must surely feel that moral education is a terrible necessity in state colleges. Where religious instructions are strictly prohibited and the law of neutrality rules with iron sceptre, there is a great danger of ignoring and neglecting moral teaching also. The teachers feel a natural tendency to avoid mentioning any subject which might indirectly give rise to theological discussions. While those who belong to the sceptical or materialistic school are too apt to throw overboard both religion and morality, and speak of God and conscience with derision and contempt. In such a state of things—real not imaginary—it is easy to conceive that the students will grow into indifference to the sacred obligations of morality, and into those shallow ideas of utility and materialism, which are leading many a mind in the present state of social disintegration to infidelity and even immorality in after-life. Government is bound to teach us both speculative and practical ethics to the fullest extent possible, and assiduously train both boys and adults into habits of honesty, truthfulness, sobriety, benevolence, and general purity of character; or it must be responsible for the vices of the nation. Let Lord Northbrook utter only one word of warning, and it will like thunder rouse both teachers and pupils to a sense of their responsibilities. In the interests of public morality, we sincerely and humbly implore the Viceroy to call upon the Director of Instruc-

* Bengal Public Instruction Report, 1864-65, App. X., pp. 354, 355.

tion, inspectors, deputy inspectors, professors and teachers to inculcate moral lessons and enforce moral discipline by all means in their power, and thus make the institutions under their charge the nurseries of truth and purity." 12th *March*, 1873.

A correspondent of the *Indian Mirror* shows that the above measure would be received with gratitude by parents of all religious denominations:—

"It is not theological teaching for which I contend, but moral education. The former is wisely interdicted in all schools and colleges supported by the State, as it would convert these institutions into proselytizing agencies and cause serious and unwarrantable interference with the prejudices and feelings of the subject population. There is nothing, however, in the educational character of India to prevent moral training, in which all classes are equally interested and which all would hail with alacrity. Hindus, Mahomedans, Parsees and Christians would all be delighted to see their children brought up in the knowledge and practice of virtue, and, far from feeling disaffected, would feel profoundly grateful for the blessing."

When the Senate of the Madras University excluded Moral Philosophy except as an optional subject, *Native Public Opinion* commented upon the proceeding as follows:—

"We are bound to protest in the most emphatic terms against the exclusion of general ethics from the system of studies prescribed for the University Examinations. Our surprise is really inexpressible at finding that it is seriously contemplated to remove this subject of vital importance from even the B. A. course, and place it in the category of optional studies. We do not inquire if the University authorities are wise in adopting such a step; we are tempted to ask if they are sane? While the earnest friends and well-wishers of humanity all over the civilized globe are ransacking their brains to discover new means to prevent vices and crimes in preference to punishing them, what should be thought if an University should coolly and deliberately set aside some of the best means we happily possess already? It seems our youths are to be carefully taught to direct the level and the theodolite, but are not to know how to direct their feelings and passions. They are to study the relations between the sides and angles of trilateral figures, but are to remain totally ignorant of the relations between themselves and their fellow-men. They are to be thoroughly versed in geometric functions, but are to be thoroughly in the dark as regards the most important functions of social life. Can absurdity further go? We should, on the other hand, insist with all our might upon having ethics carefully taught as soon as the student is able to understand ordinary English. A graduated series of books upon the subject should be issued, the lowest of the series being included in the Matriculation course, and the highest in that for the B. A. degree."—*23rd October*, 1872.

The question may be raised, "whether morality apart from

religion can be taught at all; or, if taught, whether it be worth learning?"* It is freely admitted that, separated from true religion, morality is deprived of its most potent element. In the hour of strong temptation, the restraints of mere morality will be burst like Samson's green withs. Still, often they may have, to some extent, a beneficial effect.

Herbert Spencer has the following remarks on what may be expected from education:—

"We are not among those who believe in Lord Palmerston's dogma, that 'all children are born good.' On the whole, the opposite dogma, untenable as it is, seems to us less wide of the truth. Nor do we agree with those who think that, by skilful discipline, children may be made altogether what they should be. Contrariwise, we are satisfied that though imperfections of nature may be diminished by wise management, they cannot be removed by it. The notion that an ideal humanity might be forthwith produced by a perfect system of education, is near akin to that shadowed forth in the poems of Shelley, that would mankind give up their old institutions, prejudices and errors, all the evils in the world would at once disappear: neither notion being acceptable to such as have dispassionately studied human affairs."†

The value of instruction in practical ethics depends upon its character and the teacher. If "the very existence of right is denied and its essence is analysed into expediency and worldly prudence," such instruction is worthless. Cold scientific treatises made the vehicle of teaching a materialistic philosophy, do more harm than good. An inconsistent life on the part of the teacher of ethics, destroys the efficacy of his instruction. Still, it seems possible to do something, on the whole, to raise the tone of morality in India by a judicious course of instruction in practical ethics. Progress must indeed be slow. All men are more or less influenced by the community in which they live. Until education becomes more general, the level of morality can only be expected to rise very gradually. Home training far exceeds school instruction in its effects. Education will tell more upon the next generation of the educated; when the school will more frequently find an auxiliary in the family, instead of, as is often the case at present, a counteracting agency.

The three leading aims in Government education have thus been shown. Each of them is important in its place. Any Series of School Books which does not tend to promote them all, is so far defective.

---

* Fraser's Report on Schools in the United States, p. 138.

† Essay on Moral Education.

GRADES OF SCHOOLS.

In considering the books required for Government Schools in India, the different classes of schools require to be taken into account. They are divided into three principal grades, "Lower," "Middle" and "Higher." Mr. Monteath says:—

"The resolution of the Government by which the classification was directed, described the 'middle class' as 'composed of schools which do not educate up to the University standard, but which are above the schools designed for the education of the masses,' and the 'lower class' as 'composed of schools located in villages, towns, &c., and designed primarily for the education of the masses.'"*

Mr. Monteath remarks that "different principles of classification have been adopted by the local authorities." Dr. G. Smith, in his Report on the Indian Educational Collection in 1871, suggested as one object of a conference of the Directors and others:—

(a.) "To adopt a scientific and a uniform system of classifying schools as far as possible in accordance with that which is recognized in England, without interfering with the local and vernacular requirements of each provincial department." p. 49.

It is certainly very desirable to carry out Dr. Smith's suggestion.

In the following remarks the chief object of the writer is to draw attention, if possible, to the improvement of books for "lower class" and "middle class" schools. The higher education is of great importance from the influence of its recipients; but it has already received a large share of attention. The education of the masses is the crying want at present. From the vast number to be benefited, primary schools assume immense consequences. Still, books for "higher class" schools are noticed to some extent.

Lower class schools may be divided into village and town schools. The former will chiefly include the agricultural population; the latter the children of shopkeepers, artizans, and others. The course of instruction in each may be the same at the commencement; but it should differ in the higher school classes. Advanced reading books in village schools, should treat more of agriculture; those in town schools, of manufactures.

Indian farmers, like those at home, sometimes complain that going to school unfits children for labour. To obviate this objection and to draw pupils from lower strata than are reached at present, some arrangement may be attempted like the "half time" system of England.

* Note on Education in India, 1869-70, p. 32

CLASSES OF SCHOOL BOOKS.

Formerly no printed books were used in native schools. The teacher wrote out each boy's lesson on palm leaves, and for this trouble he got a present when the book was commenced. Hence at first there was generally strong opposition on the part of the teachers to the use of printed books. The people themselves also dreaded them. When Captain Stewart first used them in some schools in Bengal about 1816, the "natives apprehended it was some plan for ensnaring their children and destroying their caste."* The introduction of a book containing the picture of a lion emptied a school. In the Sanskrit schools of Bengal, "printed books are now admissible, but formerly they were forbidden as atheistical."†

Babu Bhudeb Mukerji, Inspector of Schools, Bengal, says of patshalas:—

"As to books, it is well known that the patshala system did almost without them; and it must be our care not to introduce their use in great numbers all at once."‡

With regard to English schools this difficulty is little felt. The people are apt to measure the progress of their children by the number of their school books. Dr. Duff gives the following account of the state of things in this respect when he commenced his Institution in Calcutta about forty years ago§:—

"From the thirst for a smattering of English, scores of empirics arose who professed to have recipes for some royal road towards the acquisition of the language. This consisted in making the deluded pupils secure a load of books. In a few days or weeks after entering the school, each pupil might be seen laden with a primer, a grammar, a dictionary, a book of geography, a collection, Gay's Fables, History of Greece, Pope's Iliad, and other works. A few sentences might be read in each; and the student made to believe that he was a ready made English scholar. The system had taken such deep hold of the general mind, that it was no easy matter to persuade even the most intelligent that they could ever become scholars without at once being put in possession of such a multitude of books—that it was not the amount of knowledge heaped up in the pile of school-books, which made them learned or wise, but the amount actually transferred to the mental repository."

Traces of this old feeling still remain, and some have expressed dissatisfaction at the proposal to withhold classical poetry from pupils to whom it is unintelligible.

* Rev. J. Long, Introduction to Report of Mr. Adam, p. 4.
† Bengal Public Instruction Report, 1864-65, Ap. A., p. 81.
‡ Bengal Public Instruction Report, 1863-64 Ap. A., p. 371.
§ India and India Missions, p. 578.

The following are the principal books required in elementary education:—

Reading Books of different grades, including Poetry.
Text Books on Grammar.
Do. Geography.
Do. History.
Do. Arithmetic and Accounts.
Hints on School Management, for the teacher.

The different classes of books will now be noticed.

READING BOOKS.

General Principles.—Of all books used in Government schools, the Reading Book is by far the most important. It is often the only book in the possession of a child, constituting his entire library. Mr. Pattison says in his Report on German schools:—

"Concentration of teaching is kept in view in the endeavour to make the reading book as much as possible the centre of the instruction given in the school. Neither in Prussia nor in any other state is one reading book prescribed for all the schools. Consequently there is a continual emulation among the different countries to produce the best reading book. An extraordinary amount of time and pains have been expended on the compilation of a reading book for the elementary school; and I am assured by those who have tried that the difficulties of the task are scarcely to be credited by those who have not made the attempt. The idea which now guides the various compilers is that such a reading book ought to be a *collabach*; a book that will be relished in the cottages as a sort of portable encyclopædia of useful information; but this information must not be conveyed in a dry technical way, but put in a practical concrete form."*

Laurie, in "Primary Instruction," thus points out what is required in good Reading Books:—

"*First*, that the reading lessons of the child must, if the art of reading is to be properly acquired, be graduated in difficulty, commenced as mere reading lessons; *secondly*, that they must be as *curious* in their language and subjects as the pupils' own experiences, giving these shape and development, otherwise the phraseology of general literature will be for ever a sealed book; *thirdly*, that they must be abundant in respect of quantity, if the reading is afterwards to be easy; and, *fourthly*, that the subjects treated and the style of treating them, must be graduated in accordance with the growth of mind, if the reading is to be intelligent and intelligible. Gradation in words and sentences, gradation in the thoughts and subjects of which these treat, variety, and quantity,—such, succinctly stated, must be the

* Education Commission, Vol. iv. pp. 233, 234.

qualities of the reading lessons to which the teacher should, in the juvenile stage, introduce his pupils. In other and more general words, the reading lessons, if they are thoroughly to attain their merely technical end, are, in respect of quantity and variety, to reflect faithfully, but in a more perfect form, the full range of the child's daily mental life, and in their graduation the *order of growth* of his capacities.

"It would seem, then, that effectually to teach a child to read it is necessary to adapt ourselves to the child's intellectual wants as well as his capabilities. The question of the method of teaching reading, accordingly, passes in the juvenile stage, into another and a higher and larger question,—the method of training, informing, and disciplining the young intelligence itself. The kind of reading which accomplishes this, will most effectually secure the technical end; while the possession of the technical power so acquired will be a guarantee that the child has been thus far *educated*.

"Were the objects of our care possessed of physical desires and intellectual faculties only, the work of the teachers would be comparatively easy. Lessons, oral and read, on the visible things of his experience, on the forms, properties, and relations of these, and our bodily acts, would constitute the whole work of the school—work, hard and dry, but, in the hands of one who understood his craft, not therefore uninteresting, toilsome, or unattractive. But this direct discipline of the powers of observation, comparison, and inference, though essential to good reading, as well as to sound intellectual training, is only part of the work, and that the least difficult part. To teach reading effectually, and to educate in any sense worthy of the name, it is necessary to cover, with our lessons and instructions, the *whole* field of the child's experience, and to meet *all* his mental wants. We have accordingly to recognize, interpret, assist, explain, and extend the experience of the child, as a being of imagination, and of moral and religious sensibilities as well as of intellectual faculties. This is the most delicate part of our task, and requires delicate handling." pp. 65—67.

The foregoing remarks deserve careful study. It is not sufficient to bring together a number of lessons, each perhaps interesting in itself, but not adapted to the stage of the reader's mind, and without arrangement. The books should have an "educative purpose and method running through them;"* they should be "duly adapted to the mind of the several classes of an elementary school from the very bottom to the top."†

Isaac Taylor has the following remarks on elementary books:—

"Elementary books, or, to speak more correctly, First books, should consist entirely of dainty morsels and of well-gathered flowers; but nothing should be seen in them that is comprehensive; there should be no synopses, no bird's eye views, no generalization. There is nothing the human mind grasps with more delight than generalization

* Laurie's Primary Instruction, p. 99.

† Report of Committee of Council on Education, 1870-71, p. 69.

or classification, when it has already made an accumulation of particulars, but nothing from which it turns with more repugnance in its previous state of inanition."*

While the above is excellent as a general rule, there are a few exceptions. Some of the children will never get beyond the First Book. It seems desirable that it should contain a few ideas which it is particularly important to impress upon their minds, although for other reasons they had better be reserved to a more advanced publication.

Another principle is to "proceed from the known to the unknown." Thus in teaching Natural History the first course should embrace animals with which the child is familiar. By directing attention to them, his observing faculties would be cultivated. A lesson on the cat in the first course would prepare the way for an account of the tiger in the second course. The third course might include remarkable animals found in other countries; the fourth, the popular classification of animals; the sixth, scientific classification. A few animals may be mentioned as specimens:—

2nd Book.	3rd Book.	4th Book.	5th Book.	6th Book.
Dog	Monkey	Beaver	Beasts	Divisions of Nature
Cat	Elephant	Reindeer	Birds	The Animal Kingdom
Cow	Tiger	Whale	Fishes	Mammalia
Hen	Snake	Ostrich	Reptiles	Birds.

Botany would be treated similarly. The above might be the general principle with exceptions.

Need of Simplicity.—In teaching English to Indian children, simplicity is especially necessary at the outset. The language of books often differs a good deal from that used in conversation. Even English children find it difficult. Moseley says:—

"It is astonishing how entirely the meaning which a sentence is intended to convey and the scope of a lesson may be placed beyond the intelligence of a child who is yet familiar with the particular meanings and the derivations of the words which compose it.

"The severest test to which the children of a National School can be subjected is to place in their hand some book of secular instruction, to select a sentence not remarkable for the simplicity of its construction, and to try how far they understand it. If they be subjected to the further test of conveying the meaning they attach to it under correct forms of expression, the failure would be signal."

Poetry presents still greater difficulties. An Inspector in England remarks:—

"The requirement of poetry for the reading test of the 5th standard

* Home Education, p. 129.

appears to me very questionable. Its language is hardly ever understood. Figures of speech are entirely mistaken,—abbreviated and poetic forms of words completely disguise them. 'Whate er,' 'e'en' for 'even,' 'ever' for 'evening,' 'amid,' 'o'er' for 'over,' 'cot' for 'cottage,' &c. I have frequently taken portions of the 'Deserted Village,' and have rarely obtained any intelligent answers to the following questions: meaning of 'swain;' why is 'spring' called 'smiling?' 'lovely mowers;' what is a 'never-failing brook?' 'that topped,' what is the fruit of the 'hawthorn bush?' 'the village train,' what kind of a train is it? Again, 'Near yonder copse where once a village 'smiled,—meaning of 'copse'—the answer has always been 'dead body.'

"Gray's Elegy is equally unintelligible to the majority of readers. It might almost as well be written in Greek. Heber's 'From Greenland icy mountains' is another dread'ful stumbling block over which their feet often trip. Cowper's 'God moves in a mysterious way,' I have tried frequently and in vain. And, in another strain, 'The Country Mouse and the Town Mouse,' 'John Gilpin,' &c., have failed to bring out any sense of their humour, or to convince me that their readers had any pleasure in their task. In nine cases out of ten the poetry to which I have to listen is a weary sing-song, and I hear that other inspectors make the same complaint."*

In schools of a better class in India, the pupils will generally be able to give synonyms of words, and the questioner may suppose that they understand the sense. They may even repeat a paraphrase which they have committed to memory, and yet they may have no idea of the meaning as a whole. To render the passage into the vernacular, is one of the best tests. Translation exercises should receive far more attention than they often do at present.

The *Hindu Patriot* remarks:—

"But for the unsatisfactory nature of the education that our youths receive, the text-books in our humble opinion are not so much to blame as the teachers and the mode of examination. We have always been of opinion that perhaps eighty per cent. of our teachers do not understand what they teach or know how to teach."—*19th May*, 1873.

But if so large a proportion of the teachers themselves do not understand what they teach, there is the greater need of simplicity in the text-books.

The mode of examination has no doubt had a good deal to do with the practice of cramming. Improvement in this respect is gradually taking place. The Calcutta University has determined to follow the Bombay plan of not prescribing text-books for the entrance examination, and probably the Madras University will adopt the same course.

* Report of Committee of Council on Education, 1867-68, pp. 274-5.

Adaptation to India.—It may seem a truism that the books used should be adapted to India; but it is wonderful how much it has been overlooked. Englishmen, Scotchmen and Irishmen have often introduced the books they were accustomed to teach at home. It is plain that books intended for a different zone cannot be suitable, in some important respects, for India. As well might a Scotch farmer, transferred to the burning plains of the Carnatic, attempt to cultivate in the same way as in the Lothians.

The Madras Public Instruction Report for 1855-56 quotes the following, showing the unsuitableness of English books for India:—

"It would for instance be of little utility to place in the hands of a native child a book descriptive of the natural phenomena of a northern climate or of many out-of-door or in-door games of English school boys, or of the scenery there, or of the habits of the animals of a northern country; all of which are so dissimilar to those of the tropics, that the child would either not recognize the scenes described, or be taught facts, which, though correct as regards England, are not so as regards this country. So, likewise it would be out of place to have the oak, the elm, the ash and the birch described as familiar to the youth of India. It is well known that with many of the tribes of this country the dog is not the familiar companion of man, nor is the hog ordinarily used for food; and these and similar points should be carefully attended to in any book for the Natives of India." p. 56.

The "Supplement to the Fourth Book" of the Irish Series is read in the Government Schools in the Madras Presidency. The *Madras Educational Record** quotes from it the following "highly instructive passage":—

"Many silly girls fancy that a small waist is much to be admired, and in order to acquire this, they lace themselves so tightly that they can hardly breathe. This pernicious habit often makes the backbone curved, or the ribs bent or causes injuries in the chest, which hurt the health dreadfully."

Such a caution is not very appropriate in the case of Hindu boys!

In preparing books for village schools, the compiler should have as full knowledge as possible of Indian ryots. Some years ago an interesting article appeared in a home periodical, "A Crew Boy's Mind," which gives an idea of what is meant.

It would be very useful to have similar sketches of an "Indian Ryot's Mind" and his mode of life. Four or five might be written, one in each great division of India, and including Muhammadans as well as Hindus. Those who drew them up might have points of inquiry indicated, e. g., the ryot's house, its furni-

* September, 1871.

ture, its surroundings, the daily life of the ryot from childhood to old age, his earnings and his outlay; his ideas of natural phenomena, geography, history, the British Government; his views of right and wrong; his wants, his wishes, &c.* On many points his mind would be almost a total blank.

The object of such sketches would be to learn what the ryot does know, in order to teach him more effectually what he does not know, and to give him the information which he most requires.

Two or three descriptions of shopkeepers and artisans would also be valuable. Such sketches might be published in the Records of the Government of India, as they would be useful in various ways.

Adaptation to India, of course, refers chiefly to elementary books. They ought to possess this quality to be intelligible to beginners. But by degrees purely English books should be more and more introduced, to enable the students to understand the ordinary literature of the language.

The Government Resolution.—It will be seen that the foregoing remarks agree substantially with the views expressed by Lord Northbrook. In the case of *elementary* education it is a sound principle that "the contents of the book taught shall be as much as possible within easy range of the pupil's comprehension and ordinary experience." "The introduction of books containing allusions to scenes or ideas which boys of this country cannot possibly realise or appreciate is apt to hinder progress in mastering the language itself, which should be the main object of education at this stage; while examinations upon this kind of instruction must have a tendency towards favoring the practice of what is commonly called cramming, which, in the training of schools, it is particularly expedient to discourage."

Lord Northbrook's Resolution must be understood as a whole. The above remarks refer solely to "elementary" education. His Excellency distinctly states that "the more advanced student may be required rapidly to acquaint himself with a variety of new ideas and of references to things which open out fresh lines of thought or points of view." One great object of English Education is to fit a student to understand and appreciate English literature. To qualify him for this, he must have practice in reading ordinary English authors. Here he must have books with "classical metaphors" and "allusions" to "European history" and "social life." All this is true, but it is perfectly consistent with the first part of the Resolution.

* There is a work by Martin Doyle which the writer has not seen: "The Labourer, in his Moral, Intellectual, and Physical Conditions." It would probably afford some useful hints.

Review of English Reading Books.

It will be useful in considering what Reading Books are required in India to review briefly existing works of the kind. They may be divided into two classes—books published at home, and books compiled in India. These two may be noticed in turn.

I. *Books published in England.*

Reading Books in England have passed through various phases during the last half century. Fifty years ago elementary books began with long combinations like ba, be, bi, at, et, ble, ble, &c. and with many columns of words for spelling, interspersed with a few reading lessons. The contents of advanced books consisted chiefly of extracts from oratory, dialogues and classical poetry.

Lord Brougham and others originated the "Society for the Promotion of Useful Knowledge," and endeavoured to diffuse a taste for science. The Irish Reading Books were largely constructed on the system thus recommended. They contain some admirable lessons, *e. g.*, those on money matters by the late Archbishop Whately, but as Mr. Fitch remarks: "The great fault in that cheap and popular series was, that the language was too bookish, and that a single page often contained more technical and unfamiliar words than could be adequately explained in a whole day."*

The "Supplement to the Fourth Book," one of the Irish Series, is prescribed for Zillah Schools in South India. The *Madras Educational Record* says, "It contains selections from the works of a great many authors, both in prose and verse, arranged, as far as our observation goes, without any attention to method or utility."†

After quoting the "highly instructive passage" extracted at page 52, the reviewer remarks:—

"This English Reader, bad as it is, contains many good extracts from various authors, and, as many of the pieces are not of a technical nature, it is, in comparison with the Third Reader (of the Madras School Book Society) a not unsuitable text-book. At the same time a much better one is required, and a much better one should be found or compiled."

The Report of the Education Commission in 1861 says, "Most of the Assistant Commissioners and several of the Inspectors complain of the dulness of the reading books." (p. 261). Some compilers of reading books then went to another extreme. Mr. Fitch says:—

"Instead of crowding their pages with information, they have

* Report of Committee of Council on Education, 1864-65, p. 107.
† September, 1871.

determined to give no information at all. The fear of using a hard and repulsive style has led them to the adoption of language so ostentatiously childish, that it is often difficult to find in a lesson a single word which admits of easier explanation, or which is above the level of the pupil's own daily talk. These books have unquestionable advantages. They facilitate the mechanical art of reading, and they make the lessons attractive and amusing to the little ones. It is a great gain to a child to form pleasant associations with the thought of a book, and to form them as early as possible. But on the other hand, books of this kind teach little except the art of reading. They do nothing to enlarge the learner's vocabulary, or to familiarize him with the ordinary language of books or of educated men. Moreover, they do not suggest to a teacher the necessity for any questions. They discourage, as far as their influence extends, all cultivation of the intelligence in connection with reading, and they fail to leave on a child's mind a due sense of the seriousness of study, or any strong feeling that he has much to learn from books. I own I should like to see a larger admixture of good working lessons among the fables and fairy tales of the modern books; and I hope teachers will find that there is a golden mean equally remote from Goody Two Shoes, and from those appalling essays on the graminivorous quadrupeds and the monocotyledonous plants, which have so long bewildered the little readers of the Irish books."*

The Education Commission, in 1861, complained of the want of good books for children :—

"Those which have come under our observation, though many of them possess considerable merit, leave much to be desired. This remark is true with regard to reading books especially."†

One Inspector says :—

"It is to be feared that the reaction against the dryness and the *utile* of the old books is leading us to prefer the *dulce* alone, and that the happy combiner of the two who will carry off every vote, has not yet appeared."‡

Another Inspector remarks :—

"Once and again have both managers and teachers applied to me to recommend a really good set of standard books; I have been fain to confess my inability to do so. It is well known that not less than six or seven standard series have been lately published, some by societies, some by individuals, others again as a publisher's speculation, and a vast improvement they are on many of the old school reading books; yet I cannot think that any single series comes entirely up to the mark, and teachers' complaints are numerous. The set is too expensive; or, if cheap, so badly got up in paper and binding, as to last no time; it is too hard, or too childish. One series indulges in eccentricities of

* Report of Committee of Council on Education, 1864-65, pp. 167, 168.
† Report, p. 361.
‡ Report 1866-67, p. 183.

spelling and phraseology, though the stories in it are, by many, thought to be almost too numerous and amusing; another is so dry and scientific, that no child can possibly read it with the slightest interest. Such are the comments heard on every side. I must confess, there seems to me, to be one desideratum still in all, an accurate attention to the strictly worded requirements of Article 48 (Revised Code), and a most studious and careful gradation in reference to that Article. A series thus prepared would be a great boon; as *attendant*, the best that managers can do, is to endeavour to select from the various published series the particular standard or standards in which each may excel."*

The Education Act of 1870 gave a great impulse to the publication of reading books. The writer has carefully examined all, of any note, that have been issued. The complaints already quoted still apply to a large extent. But even a series that left nothing to be desired in England, would by no means meet the wants of the case in India.

2. *English Reading Books published in India.*

Some remarks may now be made on the principal English "Readers," specially prepared for Government Schools in India. It is an invidious task to point out defects; but this is absolutely necessary to reform. The writer willingly acknowledges the services of men who have laboured for the improvement of School Literature. But the world moves on. To use Bacon's well-known figure, we stand on the shoulders of our predecessors, and should see farther. All the books which will be noticed have their merits and deserve careful study.

Series of the Calcutta School-Book Society.—This Society, established in 1817, was the first that produced school books, and has rendered good service in its day. Its "Readers" have a considerable circulation in the Bengal Presidency. Their chief defect is that they are framed after antiquated English models. Some of them have indeed been revised, but still they are far behind the times.

The English Spelling Book No. I., after the alphabet, begins with ba, be, bi, &c. ab, eb, &c. bla, bli, &c. This is sufficient to show the educational era to which it belongs. The same remark applies to Spelling Book No. II, with its long columns of "Words of four syllables accented on the first," &c.

Readers No. I and II consist largely of extracts from English Reading Books of the time of Mrs. Barbauld, Mrs. Trimmer and Miss Edgeworth. The sentiments are good; but the scenes are too English. A sparrow thus reproves a redbreast:—

"Can the weak warbling pretend to vie with the sprightly accents of

* Report of Committee of Council on Education, 1864-65, pp. 194, 195.

the thrush and the blackbird; with the various melody of the lark or the nightingale, whom other birds far thy superiors, have long been content to admire in silence?"*

The following extract, in addition to the above defect, offends good taste:—

"Frank Pitt was a great boy; he had such a pair of fat cheeks that he could scarce see out of his eyes, for you must know that Frank would sit and eat all day long.

"First he would have a great mess of rice-milk; in an hour's time he would ask for bread and cheese; then he would eat loads of fruit and cakes; and as for meat and pies, if you had seen him eat them, it would have made you stare. Then he drank as much as he ate."†

The great fault is that the scissors have been used instead of the pen.

The more advanced books contain a number of interesting lessons, but they are thrown together without system.

One drawback to their popularity, is the entire absence of any explanatory notes.

Howard's Series.—This, which is published by the Bombay Education Department, has a large circulation in Western India and the Punjab.

The Primer is a fair compilation, though susceptible of improvement. The Second Book, especially Part II, is very defective. Many of the lessons are diametrically opposed to the "sound principle of elementary education, namely, the contents of the book taught shall be as much as possible, within easy range of the pupil's comprehension and ordinary experience." The following sentences from Part II, may be quoted as examples of "allusions to European history" unfit for a *Second* Book:—

"The ascendancy of Buckingham over the king was generally lamented." p. 14.

"The contrast of character between Cavaliers and Roundheads is skilfully drawn by Lord Macaulay." p. 15.

"Schiller's poem 'The Fight with the Dragon.'" p. 20.

"The quarrels of the Guelf and Ghibelline factions made Italy desolate." p. 28.

"The Whigs carped at the King's speech." p. 48.

"You may contrast Lingard's views with Hume's." p. 13.

"There was great astonishment at Cleon's success." p. 14.

"Horace was not a believer in Jupiter or Phœbus." p. 14.

"Sophocles was preceded by Æschylus." p. 77.

The two parts of the "Third Book" contain an anecdote of Aurungzebe, the Queen's Proclamation and a lesson on loyalty. The remaining lessons consist of English extracts, though now

* English Reader, No. II, p. 53, Revised Edition, 1871.
† English Reader, No. I p. 6.

and then a few sentences are added. As a whole, the series wants gradation; and is little better adapted to India than books published at home.

Series of Babu Peary Churn Sircar.—The Series by "Peary Churn Sircar, Professor, English Literature, Presidency College," Calcutta, claims to be "in use in almost all the Schools in Bengal and Behar." There are six Reading Books, varying in size from 60 to 180 pages. Many of the lessons are extracted from English books; but some are original, and others have been adapted to India.

The First Book contains the combinations ba, be, &c., bla, blo, &c., nb, eb, &c., alt, elt, &c., followed by easy lessons.

Numerous directions are appended for the use of the teachers, some good, others by no means appropriate. Thus after the short poem:—

"God made the sky that looks so blue;" the remark follows:—

"*Obs.* In this lesson the children should find out the *nouns*, and learn to distinguish the different kinds of nouns." *Second Book*, p. 16.

After "A Child's Morning Prayer,"

"I thank thee Lord, for quiet rest;" follows:—

"*Obs.* Children should be farther exercised in *pronouns*, and their numbers, persons, and cases, &c." *Second Book*, p. 28.

The sentiment of the poetry is good, though sometimes the choice is rather curious, *e. g.*:—

"O bless me! Mary, how is this?
Your hands are very dirty, Miss;
I don't expect such hands to see
When you come in to dine with me."

The Sixth Book contains, among other extracts, "The Hermit," "The Deserted Village," &c., and concludes with an "Address to the Deity" by Mrs. Barbauld.

The Series does not give much evidence that the compiler worked on a plan—that he arranged the order of the lessons beforehand. In illustration of this, a list may be given of the descriptions of animals as they occur in the different books:—

1st Book.	2nd Book.	3rd Book.	4th Book.	5th Book.
Cow	Calf	Horse	Sheep	Anecdotes of the Horse
Dog	Cat	Bear	Camel	Shark
Duck	Jackal	Dog	Rhinoceros	Classification of Animals
Ass	Goat	Mole	Frogs	Birds
Cat	Bear	Owls	White Bear	Fishes
	Ostrich	Beaver		Reptiles
	Birds	Bees		Whale fishing
	Ores.	Elephant		Bison
		Tiger		Elephant
		Buffalo		Reindeer.
		Uses of Animals		

Some animals are described twice, while others, representatives of classes, are omitted. The style, it is true, differs in the higher books, but there is an absence of order.

Physical science does not receive much attention. A boy might read the whole Series and not know that such a thing existed as a telescope, a microscope, or an electric telegraph. The only allusion to railways is about being too late for the train.

There are several lessons on health, in which the Series is superior to the two before mentioned. These are salutary cautions against the use of intoxicating liquors. Of course there is no reference to Christianity; but the books are interesting as showing how far religious teaching may be introduced.

God is acknowledged as our Creator, and our duty to him is thus stated:—

"We cannot see God, but He sees all that we do, and takes care of us. He is kind to all who love and fear Him. We should thank God for all the things that we have. We should not lie, or steal, or do any thing else that He hates. How good is God to us! I wish I could love Him, praise Him, and fear Him, as I ought to do. I will pray of* Him to help me to do so, and keep me from all sins. Then I shall be good and happy."†

The poetical lessons include several by Watts. Prayer is thus referred to:—

"There is an eye that never sleeps,
Beneath the wing of night;" &c.

The moral and religious tone of the Series is far higher than that of the Bengali Reading Books which have the largest circulation. In the 67 pages of the Bornoporichay, Parts I and II, there does not seem to be a single allusion to God or a future state. The following are specimens of the moral teaching:—

"1. Do not speak bad words to any one at any time. To speak bad words is a great fault. Whoever speaks bad words, no one will wish to see him.

2. While you are young, learn your lessons with your whole mind. Every one will like you if you learn to read and write. No one will like him who is negligent in learning to read and write.

3. Always speak the truth. Every one likes him who speaks the truth. Nobody likes him who tells lies. Every one dislikes him. Do not, therefore, tell a lie at any time."

The grand argument against telling lies and using bad words is, that a boy will be disliked by others if he does.

A more advanced book by the same author, Bodhodoy, is based

---

* Another edition has to.
† First Book, pp. 54, 55.

on "Rudiments of Knowledge," by Messrs Chambers. The Bengali indeed mentions the existence of God, but it omits the following:—

"It is our duty to love God and to pray to him, and thank him for all his mercies."

The original contains the following:—

"When a body is dead, all its life is gone. It cannot see or feel, or move; it is an inanimate object, and is so unpleasing to look upon, that it is buried in the ground, where it rots into dust, and is no more seen on earth. *But although the bodies of mankind die and are buried, they have souls which live for ever, and which are given up to God who gave them.*"

The passage in italics, referring to a future state, has been *omitted*. The translation merely states that the body is buried or burnt on the funeral pile.

The Bengali omits a paragraph teaching that men are "*responsible or accountable beings*, because they have souls, which are accountable to God for actions done during life."

But the translator, besides omitting passages, has in one important instance altered the original. The English edition has the following:—

"By exercising or making use of all our senses, and remembering to the best of our ability what we see and what we hear, we gain *experience*, and are better able to take care of ourselves. Thus, the senses are of very great use to us. They are like roads or avenues, by which knowledge reaches the mind; and without them, we should be in a state of total ignorance."

The Bengali version of the above was thus translated by a native who knew nothing whatever of the object for which it was wanted. The general heading is "The Senses":—

"The above five senses are the avenues of our knowledge, by which we can get all sorts of knowledge, and without which we should be ignorant of every thing. By the exercise of these senses we gain experience and experience produces the power of judgment of what is right and wrong, and what is good and bad. Therefore the senses are very advantageous to us."

Such teaching tends to spread the materialistic opinions, which, it is to be feared, are rapidly making way among the educated classes.

An examination of the English Reading Books prepared for Government Schools in India seems to confirm the following opinion expressed by an Inspector in Bengal:—

"The subject of class books for middle and lower classes of higher class English Schools has been brought a good deal under my notice

during the past year. No set of books yet published either by the School Book Society or by private persons seems to me to meet the object for which they are put forth. The selections for reading are either too difficult in language, or too childish in subject, or too much concerned with European thought and feeling, to be fitted for the youths of this country. The hand-books, too, of geography and history are, as a rule, very meagre in information and expressed in language beyond the comprehension of those who have to study them. A set of books of this class, carefully selected and compiled and published under the sanction of the Director of Public Instruction, would produce general uniformity in Schools, and be of very great advantage to the student."*

The Director of Public Instruction, Punjab, says of the text-books used in that part of India:—

"Those in English are not well adapted to the taste or comprehension of boys in this country; being compiled for England only, they are not only full of allusions quite foreign to all native experience, but never by any chance touch on subjects likely to awaken an interest in the Punjab." § 123.

The Lieutenant-Governor of the Punjab remarks in his review of the last Public Instruction Report: "The whole series of English 'Readers' is susceptible of the greatest improvement."†

Proposed New Series of Reading Books.

Evidence has been adduced to show that existing Reading Books printed at home are not considered to be satisfactory even in England. *A fortiori*, they are unfit for India. The efforts made to supply the want in India, do not fully meet the case. There seems an urgent call therefore for the Government of India to secure the preparation of a series expressly adapted to the country and including the latest educational improvements. A few suggestions may be offered respecting the contents.

The general principles on which school books should be prepared have already been stated. The remarks under each head will simply refer to details.

Elements of Reading.

Some years ago the writer consulted the late Dean Dawes about the improvement of education in India. One advice was, "Begin at the bottom and work upwards." This rule may certainly be applied with advantage to the preparation of Reading Books.

One of the educational reforms most urgently required in India is a better mode of teaching to read. Not only is a great

* Bengal Public Instruction Report, for 1869-70, App. A., pp. 284, 245.
† Punjab Public Instruction Report, for 1871-72, p. 4.

amount of time wasted by old methods, but the pupils acquire the habit of reading without paying any attention to the sense.

The former system of teaching reading in England and the present system in native schools in India, are very much alike. In England, it was the same as that now followed in the elementary books used in Bengal, viz., the alphabet and combinations, ba, be, &c., ab, ac, &c., bla, ble, &c. In the vernacular schools, the alphabet is first taught, and then the consonants combined with vowels, as ka, ki, &c.

The above course is a great drudgery to a child. Nor is this the only objection. Dunn says :—

"The great evil of putting before children unmeaning combinations of letters, such as 'bla, ble, bli, blo, blu,' and all the rest of this ridiculous tribe, is, that in reading them, a *habit* is formed of separating the sight and sound of words from sense, a habit which frequently cleaves to the mind long after the days of childhood have passed away."*

Educationists are now agreed that the best course is "divide and conquer." Instead of beginning with the alphabet, a short easy word, like no, go, is taken. It is easily recollected as being familiar. It may be written on the black-board or taught by sheets, or by, what perhaps is best, moveable letters. The child should be taught to read the word by the phonic method i.e., giving the *sounds* of the letters, not their *names*. Next, according to the excellent native practice, the word should be written. At first each child should write it on the black-board. This prevents the hasty scrawling of a great many misshapen letters. Each character is judged of and talked of, as it is formed, and there is a greater desire to take pains.†

By concentrating attention upon two letters, they are easily mastered. The child is pleased, for he feels that he is making progress.

Other words may be taken up similarly, till all the letters of the alphabet have been acquired. Then, but not till then, the alphabet may be taught in regular order.

In the vernacular languages, the vowel combinations should come next. Instead of teaching k combined with all the vowels, the vowel ā should be taught combined with the consonants. Here simple words should be used, bāba, &c. The syllabary should not be taught.

The joined letters are the greatest difficulty in the Sanskrit-derived languages.‡ By classification, the labour of acquiring

* Principles of Teaching, p. 70. † Mrs. Turnfield.

‡ Several years ago, Professor Jarrett proposed that they should be done away with, just as the numerous contractions in old Greek MS. are no longer used. This useful reform is perhaps in advance of the present age.

them may be greatly abridged. Some follow each other; others are written below, &c. Each class should be taught separately by words containing examples of them. There should also be reading exercises upon them. The joined letters should not all be taught at once.

The writer has not seen any Government Vernacular School Book prepared fully on the above principles. The Tamil First Book exactly follows the native method. In the case of some other languages, a few improvements have been introduced.

A great boon would be conferred on schools by the publication of Sheet Lessons, similar to those used at home. They are much preferable to books for beginners. The attention of all the children can be secured, while they can be made to read words in any order. Children can often repeat their lessons by heart, while they cannot read them.

It must be admitted that the Sheet Lessons would not be popular at first with ignorant schoolmasters. It is not the *custom* to teach in that way. There is another reason—it involves more labour.* According to the old method, the children sing the letters of the alphabet, while the teacher sits at his ease. But the benefits would gradually be seen and they would come into use.

The writer is not urging a want which has already been supplied. An examination of the Calcutta, Bombay, and Madras Government Catalogues shows that vernacular Sheet Lessons are not included. This is one proof that education in India requires to be thoroughly investigated.

With regard to elementary lessons in reading, Lord Northbrook's resolution expresses the right course: "The contents of the book taught shall be as much as possible within easy range of the pupil's comprehension and ordinary experience." When some facility in reading has been gained, the child's vocabulary should be enlarged by the acquisition of new words.

Preservation of Health.

The importance of instruction in this has already been shown. It will best be secured by a graduated series of lessons in the Reading Books. While a separate Manual on the subject should be prepared for teachers and Government Officers whose duties require them to attend to sanitary measures, it cannot be expected to be studied in schools. Besides, even if it were introduced, it would be read only by a few in the upper classes.

* In the London International Exhibition of 1871, the Oudh Government exhibited a "Clay model of a Mahomedan Indigenous School, with the master in a recumbent position smoking."

As some children never get beyond the First Book, it should contain sentences like the following:—

"Breathe pure air and drink pure water. Keep your body and dress clean. Filth is the father of disease. Vaccination keeps away small-pox." They would form texts on which the teacher might enlarge.

The succeeding Books should contain more and more details. The following are some of the subjects which might be noticed:—

Lessons on the Structure of the Body.
Need of fresh Air and pure Water.
Advice about Food and Dress.
Importance of Cleanliness.
Value of Exercise.
Advice about Houses and their surroundings.*
Vaccination.
Treatment and prevention of Fever.
Precautions against Cholera.
Snake-bites, advice about Accidents.
Management of Children (for girls' schools).

Early marriages are a great obstacle to the improvement of the physique of the people. In some parts of the country there is a change for the better in this respect. A Bengali newspaper remarks:—

"We have not quite such baby marriages as we used to have before. . . Our readers will recollect that, the question as to what age should be fixed upon for converting a girl into a wife was referred for medical opinion, and that the replies received fixed the age about 16. This is still too early. The period should be later, for unless we have strong Mammas and Papas we cannot expect to have strong babies."

Some advice may be given on this subject in an appropriate form.

Teachers should encourage their pupils to engage in active games. Mr. Woodrow has the following remarks on this subject:—

"Cricket has been tried at several places, and sometimes a decent eleven has been trained; but the whole thing depends on the energy of some one European teacher, and when he leaves, the cricket club collapses. Cricket is not indigenous in India, and exists among Bengali boys as an exotic plant which shrivels up in the first adverse wind. . .

"It would, I think, be well, if instead of introducing European athletic exercises and European games, we encouraged genuine Native games and sports. European games, even the glorious game of cricket, are looked upon by some Hindu gentlemen with suspicion, as being

* When Sir Madhava Rao was Dewan of Travancore, he offered a prize for the best design for a villager's house.

foreign and 'outlandish.' In Bengal the rich should learn to ride well and to shoot well, but boys of all classes could compete together for prizes in running, jumping, leaping, wrestling, and swimming. It would indeed be a pleasant variety, if instead of superintending the ever-recurring competition in book knowledge, I had now and then to award the prizes to the victor in the games."*

Carlyle's views regarding the dignity of labour require to be diffused in India. Mr. Woodrow observes:—

"There is some defect in our system of education, since educated Hindu gentlemen of good caste still continue to regard physical exertion as beneath their dignity. Because it never has been their custom to pull at ropes or bear burdens, they object to do so even on an emergency like the cyclone. Many had the knowledge to foresee the bad consequences of allowing trees to rot in the tanks, but few had the will to remedy it."†

The following directions about Fever, issued by the Madras Medical Department, will give some idea of what is meant by the lesson under this head:—

"When a person is attacked with fever, he should not expose himself to the sun, the night air, or rain, but stay in the house, and take a dose of any simple purgative medicine, such as castor-oil.

2. When this has cleared out the bowels, he should take the vegetable medicine (quinine), which has been proved the best of all remedies for fever.

3. The mode of taking it is as follows:—For a grown-up person, put into a cup as much quinine as will lie on half a rupee, and having added some water, stir it well and drink the mixture. A similar quantity should be taken three times every day until the fever ceases. Thereafter, one dose daily for a week or so will be sufficient to give strength to the body and prevent the return of the fever.

4. Children suffering from fever should also get a purgative and quinine. A child under five years of age may get as much quinine as will lie on a two-anna piece twice a day. A child of from six to twelve years of age as much as will lie on a four-anna piece twice a day.

5. Many persons leave off taking food when attacked with fever, but to do so is a bad custom, as it makes the fever stronger and may produce evil consequences. Persons ill with fever will find it beneficial to drink milk, conger, good pepper-water or soup, and as soon as possible should begin to take their ordinary food.

6. Persons recovering from fever should keep the body warm and never sleep outside the house at night.

7. During the feverish season of the year, people should wear warmer clothing than usual, and refrain from sleeping in the open air or in damp clothes."

---

* Bengal Public Instruction Report, 864-65, App. A., pp. 5, 6.

† Ibid, p. 4.

The *Kurnool Gazette* gives some simple precautions to be adopted against cholera:—

"1. Keep house, clothes, person clean.
2. Clean drain daily with fresh water.
3. Bathe daily.
4. Filter water for cooking and drinking.
5. Be careful what you eat; avoid cold rice, jaggery, puttanee, unripe or overripe fruit.
6. Do not journey on empty stomach or sleep in the open air."

The ravages of small-pox in India are well known, though they are gradually diminishing through the spread of vaccination. The writer once examined a school in a remote part of British Ajmere. He found out of about fourteen boys in the highest class nearly every one marked with the disease, and one or two had each lost an eye. The advantages of vaccination should be pointed out. Dr. Blanc, of Bombay, vaccinated from the sacred cow itself. This would be interesting to the Hindos, and tend powerfully to remove prejudice.

To aid in the preparation of such lessons, it is very desirable that the Sanitary Commissioner in each great division of India should obtain two or three papers from the most competent European and Native Medical men, noticing the prevailing sanitary errors which require to be corrected; and forward them with his own suggestions. The whole might be printed in the Records of the Government of India. While the errors differ to some extent in different parts of the country, if only two or three men wrote, they would probably omit some important points. Such a collection would be of great value in compiling the Health Manuals already noticed, as well as in drawing up lessons for School Books.

Agriculture and Manufactures.

India has very few mines; its manufactures have suffered greatly from European competition. Its agriculture is, therefore, of very great importance.

Native agriculture should not be unduly depreciated. The implements are rude; "custom" is the chief guide. Still, it is so far creditable that land which has been cultivated for many centuries continues to yield fair crops.

But it cannot be denied that native agriculture is susceptible of many improvements. Piddington says:—

"There is not a native village in Lower Bengal in which heaps upon heaps of cowdung, ashes, and the earth from the cattle-sheds are not to be found obstructing the streets, and by the side of this too as many patches of waste land as would furnish the whole village with twenty

times the fruit and garden-stuff they daily *buy* at their markets, and still leave enough manure to double the crops of their fields."*

W. Robertson, Esq., Superintendent of the Madras Experimental Model Farms, in his interesting Report for 1871-72, refers to the usual practice of the ryots to allow paddy crops to stand until *dead* ripe. The half of a plot of land early harvested produced per acre 350 lbs. more of grain and 1,871 lbs. more of straw than the half allowed to stand until it was *dead* ripe.†

The Government of India has made some efforts for the improvement of agriculture. Cotton has received special attention for a number of years. The establishment of experimental farms will prove of great value. Much was expected at one time from Carolina paddy, and, under certain conditions, its cultivation may be highly advantageous. But Mr. Robertson has shown that it has a long deep root, while country paddy is a surface feeder. The latter may thrive where the former would starve.‡

It would occupy too much space to enter into details regarding the improvement of agriculture in India. Mr. Robertson's "Agricultural Experiments conducted on the Government Experimental Farm at Madras," may be consulted.

Education may aid the other measures of Government. The Report of the Committee of Council for 1851 contains the following:—

"Some good elementary books on agriculture are much needed to put in the hands of children in village schools. Something which applies to their own daily life; the best method of gardening, of dressing, of measuring; the habits and qualities of animals; the way to fatten beasts, poultry, &c.; how to preserve meats, eggs, &c.; the application of horse power in tillage; the succession of crops; good methods of irrigation." Vol. I., p. 317.

Efforts have specially been made in this direction in Ireland. There is an "Agricultural Class Book," published by the Irish Commissioners. Parts of it might be written in a simpler way, but on the whole it is excellent. One picture shows Doran's cottage, with its front wall propped up; another picture points out how it was improved. A map is given of his farm, with its badly shaped fields; another follows showing the changes made.

Martin Doyle wrote excellent little "Village Lesson Books" for boys and girls. Besides much useful advice about farming, the care of stock, &c., he now and then gives a lesson on "Minor Morals:" *e. g.*

"Many country boys often become almost as uncourteous and

* Scientific Principles of Agriculture, p. 45.
† Report, page 33.
‡ Ibid, p. 19.

brutish as pigs; can it be from being so much with them? They answer their betters rudely and in a grunting surly tone, and have no more notion of making a bow or taking off their hats or caps, when spoken to by a passing lady or gentleman, than the pigs have of turning up their snouts by way of civility."

It has been objected that "our present system of education tends to give the native youth a taste for a town, rather than a country life,"..." the very thing which ought *not* to be done."*

If simple lessons on agriculture did nothing more than explain the *rationale* of operations, a great end would be gained. The Report of the Education Commission in 1861 mentions Mr. Moseley views:—

"He thought that the labouring classes ought to be educated 'by teaching them to reason about and understand things connected with their ordinary pursuits'. . . . He appears to have thought that the scientific principles which lie at the root of most of the common operations of life should be so instilled into their minds as to enable them to understand the reason of these operations, and to take pleasure in studying, criticising, and improving them as they grew older." p. 117.

Improvements may also be suggested in the cultivation of the leading staples; new plants may be made known; new processes described; &c.

Emigration should be noticed. Some parts of Bengal are like a rabbit warren, while British Burmah, with a rich soil, has a very sparse population.† The advantages of emigration might be pointed out and the most promising fields mentioned.

In Town Schools, *Manufactures* and *Commerce* should receive more attention. Dr. Forbes Watson and others might prepare papers showing what might be done in this respect.

By means of notices in School Books, Government would be able in a short time to diffuse information all over the country regarding plants whose cultivation should be encouraged, or manufacturing processes which it is desirable to introduce. Judgment would, of course, be necessary, and the thing should not be overdone.

Social Economy.

While general principles applicable to all countries should be taught, it is of special importance to direct attention to prevailing errors in India. Some of them have already been mentioned; one or two others may be noticed.

The *universal propensity to borrow* is one of the chief causes of

---

* Fiddington, p. 6.

† See Special articles in the *Friend of India*.

the poverty of the people of India. Many years ago the Quarterly *Friend of India* remarked :—

"Among other nations there exists in the great body of the people, a pride of independence, and a deep-rooted aversion to pecuniary obligations. The fruit of the disposition is manifest in the cleanliness and neatness of the domestic mansion, the nice adjustment of the annual expenditure to the annual income, the gradual accumulation of a resource for old age, the punctuality of all dealings, and the general cheerfulness of the family circle. . . . In Bengal the picture is reversed. There is no desire of independence, no horror of debt; and it is scarcely possible to assume a greater contrast than between the honest, upright, industrious English peasant, and the Hindu dragging out an inglorious existence between debt and disgrace, borrowing in one quarter to pay in another, and reluctant to pay in all cases, making no provision for old age, and sitting content beneath the burden of an endless prospect of embarrassment to the last hour of life."

The people of India may be divided into a small class of money-lenders and a large class of borrowers. There are comparatively few not included in one or the other. The evil effects of the system are perhaps specially felt by the agricultural population. The Journal already quoted observes :—

"An independent husbandman, free from debt, and looking forward with delight to the whole of his little crop as his own, is almost a phenomenon in the country. Most of them, through the wretched system which now prevails among them, are in debt perhaps for the seed they sow, are supplied with food by their creditors during all the labors of the field, and look forward to the end of the harvest for the payment of a debt, to which at least forty per cent are added, and which through the way in which it is exacted, is often increased to fifty per cent."

It would be interesting to know what improvement has taken place during the last half century since the above was penned. In some districts there is probably little change; in others matters have unquestionably mended, though indebtedness may still be characterized as the normal condition of the Indian.

Two of the principal causes which lead the people into debt may be noticed.

1. *Marriage Expenses.* The love of show is a national failing. Marriage entertainments are its chief outlet. It has been remarked :—

"This grand era in his existence must not pass into oblivion without some demonstration of splendour; and however empty his purse, the applause of the rabble must be gained, and the appetites of an endless host of friends and relations regaled with a solid feast. To a man whose life is bound up in show, the plaudits of the giddy multitude and the congratulations of his own connections present an object

worthy of his ambition. The triumph of the moment outweighs every other consideration and he spends with a profuse liberality, what it will require years to replace. Under these circumstances it is by no means matter of surprise that the expenses of a wedding should bear no proportion to the means of the contracting parties, and that when a man expends the aggregate of his income for years on a single event, he should involve himself in debt and disgrace."*

In some parts of the country, officers of Government have held meetings with the leading men, and urged reform in marriage expenses. While such a course is highly to be commended, it is evident that advice of this character would be far more widely diffused by lessons in Reading Books. Many a thrilling tale might be told of the consequences of borrowing money to squander on marriage expenses.

2 *The Encouragement given to "drones."* The number of able-bodied poor in India who do nothing for their subsistence is enormous. According to the laws of Hindu society, every man possessing any means, is bound to provide for all his relatives. There is no doubt that this has its good features, and prevents a great amount of wretchedness; but it is also frequently abused. Persons who can thus obtain the necessaries of life without labour are tempted to indolence. As the *Friend* remarks:—

"There is scarcely a married man in the country who has not some of his own or his wife's kindred dependent on his bounty. These he cannot shake off; and they will seldom drop off themselves, but will continue to draw nourishment from his labour while a single mess of rice remains in the house. In the support of these indolent drones his substance is wasted and his debts increased."

The leading children with ornaments should be discouraged. It promotes love of show, and every year it leads to several murders. Where a widow's jewels are the only property she can claim, there is some reason for women thus investing money; but otherwise it had much better be put in Savings Banks.

The following extract from *Native Public Opinion* is interesting as giving the views taken of Savings Banks by some people of the country:—

"One of our contemporaries has felicitously observed that the wife of the poor native is, not unfrequently, her husband's walking Bank! This is certainly true, and we are not sorry it is so. The poor man's savings are often partly invested in jewels for the personal decoration of his *wife*. Why deprecate this? Who can possibly be a more faithful depositary? It is true the husband loses the paltry interest which he might obtain by investing in the Government Bank. But he gains in

* *Quarterly Friend of India*, 1851.

return the gratification of enhancing what beauty nature may have conferred on his spouse, and he further enjoys the innocent pleasure of seeing her overflowing with pride and affection! While the capital is in such safe keeping, it makes two human beings happy, the happiness of each constantly re-acting on the other, and thus perhaps sweetening a whole life-time. The weaker sex, all over the world, is fond of personal ornaments. But we are almost inclined to prefer the tastes of native wives to those of their European sisters. The latter generally indulge in the luxuries of dress, the materials of which soon perish irrecoverably, while the former generally have a traditional predilection for forms of enduring gold and silver. What is laid out in drapery is actually soon destroyed, while what is laid out in ornaments of precious metals is long preserved. The native wife has practically solved the apparently impossible problem of eating the cake, and yet keeping it.

"This is not all. A bit of money invested in a Savings Bank is and must be only too accessible to the owner, who might in a sudden freak of extravagance or improvidence, withdraw and dissipate the accumulations of years. On the other hand how stands the case where the same amount has been deposited in what our contemporary designates a walking Bank? The owner cannot possibly withdraw it at his sole pleasure. He would encounter the powerful yet affectionate resistance of one who is probably the most influential member of his Home-Government. The very unpleasantness and humiliation involved in revoking the cherished gifts of tenderness, and the rewards of fidelity, would be an effective guarantee against thoughtless prodigality. And yet at a period of overwhelming misfortune, in the presence of imperial necessity, the locked up funds could be readily released with the concurrence of the yielding wife.

"We are decidedly reluctant to set about the dis-establishment of what is certainly one of the most potent as well as pleasant motives to industry and enterprise among our countrymen, namely the wish which they feel to provide personal ornaments for their wives. It would, we feel, be really difficult to estimate the loss of propelling power which our community would experience if divested of that wish. It would be equally difficult to calculate the diminution of inducements to good behaviour on the part of the wife, which must more or less follow that contingency."

Habits of forethought in money matters should be encouraged as far as possible. Even the Primer may contain sentences like the following: "The borrower is servant to the lender." "Wilful waste makes woful want." Poor Richard's savings should not be forgotten. Tales and illustrations, as well as direct advice, may be employed in books more advanced. Arithmetic may be turned to account. Questions may be given showing how rapidly interest at high rates accumulates, and how much a borrower requires to pay. The advantages of Savings Banks should be pointed out, and their superiority to paying high interest on jewels pawned.

The lessons of Archbishop Whately on "Money Matters," Mrs. Marcet's writings, Mrs. Fawcett's "Political Economy for Beginners" and many other works will yield valuable materials. Mrs. Brewster's, "Household Economy" will be useful in the preparation of a Reading Book for girls' schools and zenanas.

Mr. H. S. Reid, when Director of Public Instruction, N. W. P., caused several tales to be prepared, teaching valuable lessons in social economy. With the pressure of other subjects, it does not seem desirable to use such works as School Books, but their reading should be encouraged.

Natural Science.

The value of instruction in science has already been noticed. The subjects to be taught will now be considered.

The Report of the British Association points out an important distinction in teaching science:—

"5. To the selection of subjects that ought to be included in a programme of scientific instruction in public schools, we have given our best attention; and we would make the following remarks on the principles by which we have been guided in the selection that we shall propose.

"There is an important distinction between scientific *information* and scientific *training*; in other words, between general literary acquaintance with scientific facts and the knowledge of methods that may be gained by studying the facts at first hand under the guidance of a competent teacher. Both of these are valuable; it is very desirable, for example, that boys should have some general information about the ordinary phenomena of nature, such as the simple facts of astronomy, of geology, of physical geography, and of elementary physiology. On the other hand, the scientific habit of mind, which is the principal benefit resulting from scientific training, and which is of incalculable value whatever be the pursuits of after-life, can better be attained by a thorough knowledge of the facts and principles of one science than by a general acquaintance with what has been said or written about many. Both of these should co-exist, we think, at any school which professes to offer the highest liberal education; and at *every* school it will be easy to provide at least for giving some scientific information.

"I. The subjects that we recommend for scientific *information* as distinguished from training, should comprehend a general description of the solar system, of the form and physical geography of the earth, and of such natural phenomena as tides, currents, winds, and the causes that influence climate; of the broad facts of geology; of elementary natural history with especial reference to the useful plants and animals; and of the rudiments of physiology. This is a kind of information which requires less preparation on the part of the teacher; and its effectiveness will depend on his knowledge, clearness, method, and sympathy with his pupils. Nothing will be gained by circumscribing

those subjects by any general syllabus; they may safely be left to the discretion of the masters who teach them.

"II. And for scientific *training*, we are decidedly of opinion that the subjects which have paramount claims are experimental physics, elementary chemistry, and botany."*

It will be seen that a distinction is made between scientific *information* and scientific *training*. The former belongs more to the *School*; the latter to the *University*.

The course mentioned by Pattison as pursued in Normal Schools in Germany gives a good idea of the principal subjects which should be taught:—

"KNOWLEDGE OF NATURE—Natural history shall be taught in the first and second years' classes two hours per week; not in a strictly scientific way, or adopting any classification. The principal indigenous plants and animals shall be brought before the pupils and described to them. In botany a foundation for further future study shall be laid. They shall be taught to distinguish the principal native minerals and rocks. A popular description of the human body shall be given. It is scarcely necessary to say that a necessary condition of this instruction is a religious disposition and tendency. The pupils ought to acquire a love for nature and natural occupations. A practical direction, too, may be given to this branch of instruction by constant reference to gardening, agriculture, industry, and trade. In the third year the students may advance to natural philosophy, which shall always be treated in an experimental way, without mathematical formulæ; the common instruments, machines, and mechanical powers may be explained to them, with the phenomena of heat, electricity, and magnetism."†

Some knowledge of Astronomy is of special value in India.

Teachers in India are not qualified to select the subjects. They should be chosen by the ablest men acquainted with each; *e. g.* Professor Tyndall might arrange those on Natural Philosophy, Professor Huxley on Physiology, Dr. Hooker on Botany, &c. Such men could best indicate the points of greatest importance connected with each subject, and the order in which they might be taken up with greatest advantage. Each enthusiastic about his favourite study, would be naturally disposed to seek for it a larger share of attention than could be allowed consistently with other claims. It would be well, therefore, to inform them beforehand of the space that could be allotted to each at different stages. The determination of this would require very careful consideration.

Professor Huxley asks "four hours a week in each class" for science.‡ At least three hours a week should be allowed. The

* Schools Inquiry Commission, Vol. ii., p. 290.
† Education Commission, 1861, Vol. iv., pp. 258, 259.
‡ Lay Sermons, p. 76.

question is, how may this time be employed to the greatest advantage for all educational purposes?

Separate oral lessons on objects are sometimes given by teachers in England. When well-conducted they are of great value; but this is the exception. Few teachers in India are sufficiently qualified for this kind of instruction. Some guide is required.

In the elementary classes the best plan is that usually followed—to insert the lessons in the ordinary Reading Books. The expense of separate books is thus saved, and the lessons are certain to be studied. Pattison says in his Report on German Schools: "Separate lessons on natural phenomena can hardly be given in the village schools; but the teacher is to take the opportunities which the reading-book offers of bringing natural objects from time to time before the class." The Irish Series and many other books may be mentioned as examples, though the graduation is not what it should be, and the language often too technical.

One great object ought to be to cultivate the observing faculties. There is an admirable little book, "How to train young Eyes and Ears." In the early lessons the commonest objects are the best. In their selection the small volume of Dean Dawes, "Suggestive Hints towards an improved Secular Instruction, making it bear upon Practical Life," will yield much that is valuable, though adaptation to India will be necessary. Faraday's "Lectures before a Juvenile Audience," show how science may be simplified.

Professor Huxley mentions an important point in lessons on science:—

"But if scientific training is to yield its most eminent results, it must, I repeat, be made practical. That is to say, in explaining to a child the general phenomena of nature you must, as far as possible, give reality to your teaching by object lessons; in teaching from botany, he must handle the plants and dissect the flowers for himself; in teaching him physics and chemistry, you must not be solicitous to fill him with information, but you must be careful that what he learns he knows of his own knowledge. Don't be satisfied with telling him that a magnet attracts iron. Let him see that it does; let him feel the pull of the one upon the other for himself."*

Though this holds good, it does not necessitate expensive apparatus. In the Science and Art Examinations at home it is not

"Required that a typical collection of specimens, apparatus for the illustration of instruction, or for acquiring skill in the use of instruments, or a laboratory for practice in manipulation, should be attached to an elementary science class. Such requirements would obviously,

* Lay Sermons.

at the origin of the system, have proved insurmountable hindrances to the formation of these classes in the great majority of instances."*

Mr. Woodrow says :—

"It is the genius of the Hindoos to obtain great results by apparently inadequate means. No person watches the Dacca weavers or goldsmiths, or shell workers without astonishment. The loom, from which the most beautiful patterns woven in transparent muslin are produced, appears to European eyes a ricketty frame of bamboo splints. ... Again the traveller is daily surprised by his cook at feats of success under difficulties. He has the French skill in contriving a meal out of most scanty materials, and far more than French skill in the matter of fire and cooking pots. From these and such like indications, I believe that our Schools will produce good results with very imperfect apparatus."†

It is desirable, however, to supply a few articles not procurable in the mofussil. The set for village schools need not cost more than five or ten rupees; double that sum might suffice for a town vernacular school. Pictures would partially supply the want of the more expensive apparatus, and be useful in many ways.

As already stated, the great object in the school course is scientific *information*; in the university course, scientific *training*. In the latter, students should be restricted to one or two subjects at a time, which could be fully illustrated by the apparatus with which most of the colleges are supplied.

It will be seen from the foregoing remarks that while Natural Science is proposed to be taught in all schools, arrangements are such that they can be carried out without difficulty, and the study will not interfere with other important branches.

Men of the old school will reiterate the objection that only a mere smattering of knowledge can be acquired in this way. But as Mill remarks :—

"It should be our aim in learning, not merely to know the one thing which is to be our principal occupation, as well as it can be known, but to do this and also to know something of all the great subjects of human interest: taking care to know that something accurately; marking well the dividing line between what we know accurately and what we do not: and remembering that our object should be to obtain a true view of nature and life in their broad outline, and that it is idle to throw away time upon the details of any thing which is to form no part of the occupation of our practical energies."

It is a sufficient answer to all gainsayers that the course proposed is that recommended by the most distinguished scientific men in Britain, who have themselves tested its working in ordinary schools.

---

* Report of Royal Commission on Scientific Instruction, p. xxii.

† Bengal Public Instruction Report, 1869-80, Ap. A, pp. 22, 23.

Literature.

While the claims of science have been specially urged on account of its neglect in India, the great importance of *Literature* is fully admitted. It has been proposed that *three* hours a week should be devoted to science; literature and kindred subjects should receive *five* hours a week.

Laurie urges that the training of the imagination should receive much attention in lower class schools:—

"If this careful regard to the imagination of the young be obligatory on the instructors of children of all classes, how much more is it incumbent on the teacher of the children of the poor? Divorced as they are by poverty, and the want of sympathetic response in their elders, from the pictures, fables, poems, and narratives which surround, in lavish profusion, the children of the middle and upper classes, they have but the one chance which the day school affords of obtaining food for the starved imagination. Nor will the teacher err, if, departing from his book, which, if justice is done to other subjects, can yield but a limited supply of such material, he introduces tales into the school-room, to be read as rewards of good conduct. The time so occupied will assuredly not be wasted for apart from the indirect moral instruction which he will thus convey through the imagination, he will shed sunlight and warmth on the tender mind, without which a general and healthy growth is impossible."*

Tate remarks:—

"Fables and simple tales are amongst the best means of cultivating the imagination of children. Some little stories contain in an unobtrusive form, more practical wisdom than many learned homilies. Nothing affords children a more sparkling entertainment, than to listen to the parley between the lion and the ass, or between the fox and the crow; while each of them adheres to its character with dramatic sleekness, each, at the same time, personates some moral quality. The perception of this analogy leads, in the most pleasurable manner, to the cultivation of abstraction and reason."†

Indian literature will yield a variety of fables and tales, though care will be necessary to exclude all of an objectionable tendency.

It will be shown under other heads how geography and history may be employed, among other purposes, to cultivate the conceptive faculty. Descriptions of manners and customs, adventures by sea and land, biographical sketches, &c., may all be turned to account.

Poetry is of very great value in many respects. It will be noticed under another head.

Willm says, "The ancient Greeks united with the culture of the just, that of the beautiful; and indeed education is incom-

* Primary Education, p. 59

† Philosophy of Education, pp. 206, 207, (condensed).

plete, if it is not *æsthetic*, as well as intellectual, moral, and religious.' He adds :—

"The sentiment of the beautiful, like disinterested love, is one of the dispositions of humanity which attest its noble origin; and its development, by ennobling the inclinations and activity of man, necessarily tends to confirm the empire of his spiritual over his animal nature. To cherish and cultivate it, is to nourish and assist the inward man, the true man, and consequently, to add to his true felicity."

With regard to the extent to which the cultivation of this sentiment is practicable in elementary schools, he says :—

"I ask only that the sentiment of the beautiful and of suitableness should be a little more developed in children, that their eyes should be opened to the theatre of nature, and that they should be taught to admire its wonders.

"Who has not been struck, when in the country, with the indifference displayed by most of the inhabitants to the beauties surrounding them? This indifference does not proceed from want of leisure to contemplate them, nor from being accustomed to live in the midst of them, but principally from want of education, because the sense of the beautiful has not been awakened in their minds."*

The works of Ruskin show what pleasure may be derived from contemplating the beautiful in nature.

Moral Instruction.

Limits.—This is a subject of very great delicacy from the close connection between morality and religion. In the following remarks, the writer seeks only to carry out principles which have hitherto been acted upon in Government Education. He advocates only the teaching already to be found in the publications of the Calcutta School-Book Society, in Mr. Howard's Series; in the school books compiled by Babu Peary Churn Sircar, of Presidency College, by Babu Gopal Chandra Bandyapadhyay, Head Master of the Calcutta Government Normal School, and others. He simply seeks to impart the instruction more systematically, and with greater adaptation to the circumstances of the people than is possible with mere extracts from English books. On the other hand, he deprecates most strongly any change in another direction—ceasing to teach the grand old truths which have been acknowledged for thousands of years, and substituting for them Mr. Holyoake's new gospel of secularism. Such a course would be opposed to the religious spirit which characterises the people of India, and be a disgrace to the British Government.

* Education of the People, pp. 103, 104.

Need of Adaptation.—To raise the moral character is at once the most important and the most difficult function of education. The measures to be employed must be as carefully adapted to the end in view as the medicines prescribed for a patient labouring under a complication of dangerous maladies. No hap-hazard remedies will suffice.

The people of India have some excellent points of character and they have their failings. Their moral training demands special attention at present, for they are in danger of losing some of their former good qualities and acquiring new vices.

In drawing up a course of practical ethics, it should be carefully considered, what are the dangers to which pupils in Government schools are specially exposed? What are the virtues which require to be specially inculcated? Moral instruction should be adapted accordingly. Every lesson should form part of a carefully arranged plan, and each point should receive attention in proportion to its importance in the particular case. Currie well observes: "Much of the moral instruction, so called, given in school, runs to waste from its want of adaptation. The teacher must instruct by examples and cases of conduct which they can apprehend from their own experience." Hence books containing moral instruction should be specially prepared for India.

Basis.—It is of very great importance that moral instruction should rest on a sound basis. It has been well observed:—

"The term utility cannot be said to convey with it the idea of obligation at all." Jouffroy . . . . In Scripture* actions are enjoined because they are right, and because it is the will of God that we do them. The beneficial consequences which flow from right actions are held out as motives or inducements to comply with the will of God. But these consequences are never spoken of in Scripture as constituting the actions right, nor as forming the ground of our obligation to do them." ... "To do what is Right even for the sake of everlasting life, is evidently acting from a motive far inferior, in purity and power, to love and veneration for the character and command of Him who is Just and Good, in a sense and to an extent to which our most elevated conceptions are inadequate."†

Still, the natural consequences of misconduct may be appealed to as a powerful subsidiary motive. Currie says:—

"The child's intelligence is first enlisted in the cause of virtue by explaining to him the natural consequences of actions. This may be

---

† "The statutes of the Lord are right." Psalms xix. 8.
* "Children obey your parents in the Lord, for this is right." Eph. vi. 1.
* Fleming's Moral Philosophy, pp. 142 & 165.

done with best effect at the moment he has exposed himself to feel them; for example, if he has been guilty of untruth, we are constrained to suspect and disbelieve him for a time, and this will wound him; if he has acted dishonestly, we are constrained to withdraw from him some little responsibility, and thus show that our confidence in him is shaken; or, if he has uttered naughty words, we may decline his company when next he offers it, and let him feel the uneasiness of isolation. The experience of those consequences will quicken his understanding of the nature of the acts, and it is then that we should point out that our displeasure is exhibited, not from caprice or the sake of giving pain, but from a sense of duty. In a similar way, should his attention be directed to the nature of good actions, in connexion with the reward of confidence and regard which they naturally lead to."*

Such teaching alone, however, is defective. Dr. Duff remarks of a book much studied in the indigenous schools of Bengal, "Even its best parts can scarcely be said to rise beyond the inculcation of a *secular sort of prudence*." This applies to some English books on morals.

Indirect and Direct Instruction.—The differences between these is thus explained by Laurie:—

"There are two kinds of preceptive teaching, the Suggestive and the Direct. The suggestive is the more efficacious, because it is associated with a concrete example. In the doing of right acts, the child is presumed to be supported by the example of his teacher and fellows. By sharing the moral life exhibited daily in the school he gradually becomes a constituent part of it: it is the example of those around him that points both the moral and the way. This is true of the *indirect* moral instruction of discipline: it is equally necessary that the *direct* moral instruction of the school, in so far as it is conveyed by books or conversation, should be in the earlier years as much as possible the instruction which the example of others gives, that is to say, the instruction of biography, fable, and anecdote. The lessons of fair play and peaceableness, for example, almost defy abstract preceptive teaching in the case of the very young, but enter widely and graphically into the mind through the story of the two boys and the nut, which ends in the arbiter eating the kernel and liberally dispensing half a shell to each of the little disputants. Next to seeing a good example before us is imagining that we see it, and this we do when we read or hear of it.

"Direct Precept, if less important than Suggestive, has yet a useful part to play. It is true that all moral precepts are cases of conduct generalized from particular acts and their consequences, and therefore that to demand of a child that he shall strain his intellect to grasp fully a moral generalization is to demand an impossibility....But, true as this is, the moral generalization is not wholly valueless to the child, although not fully intelligible at the time of its being imparted. He himself is, by the very instincts of his nature and the necessities of his

* Principles of Education, p. 24.

external condition, groping his way to some such general statement of duty which will bring harmony into the chaos of his moral life by bringing law. To furnish him at the outset of his journey in search of duty with the conclusion to which the wisdom of the past has come, is like giving a young builder a plan of the house we require him to build. It is only a semblance, but it facilitates and expedites the attainment of the reality."*

Valuable moral lessons may be incidentally drawn from many subjects. The Irish Second Book concludes an account of the hen with the remark: "I wish that boys and girls always took care to obey their parents as these chickens do." The readers are told to learn from the cat to keep their hands and faces clean. Solomon sends the sluggard to the ant. The writings of Bacon, Addison, Cowper, and others often contain truths of great value. But Currie justly remarks of moral instruction: "So far from being left to take its chance in school, as it is commonly is, being enforced in a fragmentary way and at irregular intervals, just as some accident may throw it in the way in the course of the reading lesson, it should be systematically provided for."†

Duty to God.—"Ethics without a God," will certainly not meet the wants of the case. Notwithstanding the conflicting religious beliefs of the people of India, experience shows that it is possible to teach some great truths to which neither Hindus nor Muhammadans object.

The "Fatherhood of God" should be taught. We are "his offspring." "Have we not all one Father? hath not one God created us?" His greatness and goodness should be shown. The heavens declare his glory; the earth is full of his goodness. The eyes of all wait upon him and he gives them their meat in due season. The first and great commandment, love to God, should be inculcated.

"Prayer," says Fleming, "has always been recognized as one of the duties of Natural Religion. In all ages and among all nations, it has been common by some form or rite to supplicate Divine protection and favour. Among the golden verses of Pythagoras we find the following:—

> "In all thou dost, first let thy prayers ascend,
> And to the Gods thy labours first commend;
> From them implore success, and hope a prosperous end."‡

If earthly parents give good gifts to their children, how much more shall our Father in heaven give good things to them that ask him.

---

* Primary Education, pp. 178—180.
† Principles of Education, p. 25.
‡ Moral Philosophy, p. 407

God's holiness should also be taught. That God loves righteousness and hates wickedness, are great truths which all enlightened men must admit.

"It is said that Daniel Webster was once asked, what is the greatest thought that ever occupied your mind? After a solemn pause, he replied, 'The greatest thought I ever had, or can have, is the sense of my accountability to God.'"* It certainly is of great importance to realise the poet's words :—

"As ever in my great Task-master's eye."

The simple sentence, "Thou, God, seest me," contains a truth calculated to have a most beneficial influence. Even a child can appreciate the force of the reasoning, "He that planted the ear, shall he not hear? he that formed the eye, shall he not see?" A feeling of responsibility will be further awakened by enforcing the truth that "God shall bring every work into judgment, with every secret thing, whether it be good or whether it be evil."

The foregoing are great truths contained in the law written in the hearts of men, and which, in most cases, when clearly set before them, they will readily acknowledge. All of them are more or less enforced in the books at present used in Government Schools.

Moral Conduct.—The general spirit to be fostered is that of *Conscientiousness*—a desire to do what is right. This should be the grand inquiry and the guiding aim in life.

Of the moral virtues, *Truthfulness* requires to be specially enforced. It lies at the foundation of all virtuous character and is its most essential element. Perfect sincerity, a noble ingenuousness, should be held up as the model. From the beginning to the end of the series, this great virtue should be kept in view, and urged in a variety of ways suited to the capacities of the readers.

Indian literature contains numerous stories of successful trickery, showing how clever rogues out-witted honest fools. All such should be rigorously excluded.

The absurd flattery so prevalent among uneducated Hindus, tends to a disregard of truth and should be discouraged.

Remarks on giving evidence are very necessary. Perjury to injure a man is condemned by all; but to employ it in a good cause or to save a friend, is, by many persons in India, regarded as very venial offence. "The truth, the whole truth, and nothing but the truth," should be the maxim.

Allied to truthfulness is *Justice*. Perfect honesty should be enjoined. The defrauding of masters by servants under the

* Quoted in Fraser's Report on Schools in the United States, p. 158.

name of "custom" should be exposed. Honesty towards Government as well as individuals should be taught. The receiving or giving of bribes should be condemned. The detestable meanness of the rich in oppressing the poor should be held up to reprobation. The proneness of the people of India to run into debt has already been noticed. This often leads to dishonesty as well as other evils.

Purity in speech and behaviour should be enforced. The use of filthy language is exceedingly common. Women of the lower classes are much addicted to virulent obscene railing. The most disgusting language is sometimes used in families. A native newspaper blames teachers in Government Schools for not endeavouring to check the evil.

It is often melancholy to mark the change which comes over intelligent promising boys as they grow up, through the influence of immorality. In Muhammadans especially, it can frequently be seen in their very faces, and is eating into them like a cankor, counteracting all efforts for their elevation. It is a very delicate subject, but it should not be overlooked. Great care should be taken about native books in this respect. Not only should passages directly obscene be excluded, but young men should not be required to study poetry written in a voluptuous style.

Educated young men require to be warned against *Intemperance*. "Fire water" threatens to be as destructive among them as among the American Indians. The evils of the use of opium and other narcotics should be pointed out.

Respect for authority ought to be instilled. The late Superintendent of Public Schools in New York, remarks: "The tendency of the age on which we live is, it is greatly to be feared, to habits of insubordination, irreverence, and disrespect of all established authority, however sacred or venerable."* Men are prone to rush from one extreme to another. "Young India" charges "Old India" with servility. The parent complains of his son's pride and self-conceit. The last Punjab Public Instruction Report contains the following remarks:—

"Not has the system which produces few scholars been more successful in producing gentlemen. The Lieutenant-Governor desires that the department take especial care that the good manners natural to Oriental youth are not lost at school. This matter has hitherto been neglected. If the result of sending boys of good family to school is, as is now often the case, that they return pert, conceited and studiously rude and familiar, it is no wonder that parents desire to educate their children at home. English education is not a desirable thing if it only signifies sufficient acquaintance with the English lan-

* Randal's Popular Education, p. 93.

guage to write and speak ungrammatically, sufficient acquaintance with English literature to be shallow, and with English history to be insolent. English education is to be penetrated with the spirit of the great English authors; to imbibe some portion of their strength, and beauty, and nobility, and gentleness, and wisdom, to mould the life and character upon the models they have furnished. This is the standard of education to which the department must endeavour to rise." Report, 1871-72, pp. 4, 5.

Educated Hindus are ready to attribute any remarks by Europeans about respect to authority to their own love of adulation and obsequiousness. There is no doubt some truth in this, but it is not the *whole truth*. The Hindu family system, to a certain extent, trains the young to respect age. This system is breaking up. There is great danger lest the good qualities it tended to cherish should be lost. Redoubled efforts should be put forth to prevent this.

The proclivity to *self-conceit* has been mentioned.*

Human nature is much the same all the world over:—

> "When young indeed,
> In full content, we sometimes nobly rest,
> Unanxious for ourselves, and only wish,
> As duteous sons, our fathers were more wise."

While allowances should be made for this failing, judicious means should be employed for its correction. The spirit of the following remarks should be impressed upon students:—

"Beware, above all things, of an ignorant, irreverential frame of mind; distrust the learning which engenders it; a little knowledge is often times especially dangerous in this, that, instead of prostrating the mind with a sense of the vastness of science and the smallness of human wit, it puffs it up with a childish conceit at its own lilliputian acquirements. The father of English philosophy described himself as a little child playing with the shells and sand on the shores of the illimitable ocean of science, and the greatest of living physiologists charms those who have the privilege of knowing him, not more by his incomparable skill and intimate acquaintance with nature, than by the profound modesty and perfect absence of ostentation with which the treasures of his noble intellect are produced for the public benefit. Self-assertion and vanity, insolence towards the past, recklessness as to the future, satisfaction with ourselves, indifference to the feelings of others, are the certain characteristics of superficial, worthless education, and of an ill-trained moral character."†

While *self-conceit* is to be condemned, *self-reliance*, in a proper sense, should be fostered. The people generally are prone to

---

* The *Bengal Magazine* describes "too high an estimate of himself, or, in plain English, conceit," as "the besetting sin of Young Bengal." April, 1873.

† Address of the Hon. H. S. Cunningham, Madras.

succumb to evils, instead of endeavouring to remove them. In a storm, native sailors are apt to give themselves up as lost; many of the Oriyas doubtless perished in the recent famine through their own apathy. The *nil desperandum* spirit should be encouraged.

The evils of *litigiousness* should be pointed out. It is already a source of much mischief, and it threatens to grow. There are not sufficient openings for educated young men in the public service, and now, in some parts of the country, they are entering the legal profession in such numbers, that there is a plague of lawyers. These men will naturally try to make employment. Our courts are perhaps the weakest point of our administration, and afford abundant means of gratifying the natural propensity of the people.

Benevolence is fairly developed in the Hindu character, but it often lacks breadth. In general, very praiseworthy efforts are made to support poor relatives. An uneducated Hindu, as a rule, does not look beyond his caste. Max Muller says, "The Indian never knew the feeling of nationality."* The sentiment expressed by the Roman poet was never experienced:—

Homo sum: humani nihil a me alienum puto.

A Bombay reformer says, "India cannot boast of one united nation. Divided and sub-divided as we are in multitudinous sects and tribes, we can have no sympathy with one another as a nation. When the different classes of a community have no social intercourse with each other, how can we expect them to have fellow feeling amongst them?"

Through the study of Western literature, a feeling of nationality has been awakened to some extent among educated Hindus. Still, though a wider circle is embraced, the old spirit is largely manifested. While some have been infected by Anglomania, others suffer from what is termed Anglo-phobia. There is a pseudo-patriotism which stands up for every native custom however absurd. A Bengali justly remarked at a recent meeting of the Bethune Society that "*nationality* should not be sacrificed for *rationality*."

The "Brotherhood of Man" requires to be taught as well as the "Fatherhood of God." It should be mentioned that Babu Peary Churn Sircar notices this in his series. The anecdote of "A kind Gentlemen"† is based on the parable of the good Samaritan; and the same spirit is inculcated in the poem, "Who is my neighbour?"‡ Mr. Kempson's "Readings in English Poetry,"

* Sanscrit Literature, p. 30.
† Second Book, p. 97.
‡ Fifth Book, p. 151.

and the series of the Head Master of the Calcutta Government Normal School both contain the fine little piece :—

"I ask not for his lineage,"

The evils of indiscriminate almsgiving should be pointed out. While the sick, the aged, and orphans should be assisted, it is pernicious to give to able-bodied men, too lazy to labour for their subsistence. The maxim, "If any man would not work, neither should he eat," ought to be enforced. Some of the almsgiving of the Hindoos is extorted by fear. It would be well to explain the words, "The curse causeless shall not come."

Duty to Women requires special attention. In the first Introductory Lecture ever delivered at the Calcutta Medical College by a Native, Professor Chuckerbutty says of the elevation of the women of India : "Of all the great social problems to be solved in this country, this is undoubtedly the greatest. It is useless to hide from ourselves the fact that the degraded condition of the women of India is the foundation of numerous social evils."

In some respects women in India are kindly treated. They are well fed, better clothed than the men, supplied with jewels, and have about as much influence as women elsewhere. Still, there is much to be done.

Professor Wilson contrasts the Teutonic with the Hindu feeling regarding women. Of the Hinda Tales he says, "The greater number of them turn upon the wickedness of women, the luxury, profligacy, treachery, the craft of the female sex."* This applies equally to Mohammadans. Eastwick says of Sadi, "His notions of the female sex are in general not very laudatory, and his opinion on this head, seems to have strengthened as he grew in years."†

First, all tales calculated to give a degrading idea of women should be rigidly excluded. Instead of these, there should be substituted incidents in the lives of good and noble women, fitted to inspire respect and admiration for the sex.

The important subject of *Female Education* should have a prominent place. Its advantages should be clearly pointed out. Even the Primer might contain a sentence like the following, "Girls should learn to read as well as boys." This might be expanded in the Second Book, and so on in more advanced Readers.

The evils of *Early Marriages* in a physical point of view have already been noticed. Another injurious effect is that mothers are too young and inexperienced to manage children properly.

A Hindu wife is not allowed to eat with her husband; she

---

* Works, Vol. iv, p. 114.

† Preface to translation of Gulistan, p. 11.

waits upon him when he is taking his food, and eats herself when he has finished. Some changes in Hindu social life are very desirable.

At the Allahabad Missionary Conference, the Rev. D. Herron strongly advocated the use of tables and spoons. He mentioned a gentleman who said to a rajah, "I have no hope of a people who continue to sit on the floor and eat with their fingers."

Mr. Herron remarked :—

"The argument in favor of the spoon is cleanliness, and this has more weight with us than any custom, however sacred or ancient, in favor of the opposite quality. The table too is recommended by cleanliness, and also by convenience and comfort. With us, it is an *educator* and *civilizer*. Next to the word 'hearth' the word 'board' or table is the most expressive of what is good and comfortable in the domestic and social life of England and America. At no time does family life look more beautiful than when father and mother and children are seated around the family table. Nowhere is the family so made to feel its unity. There is no more pleasant and cheerful occasion in a well-ordered home. There is no better opportunity, for parents of piety and culture, to inculcate lessons of thankfulness and temperance, to train to habits of unselfishness and graceful acts of kindness, and to give ease and refinement of manners." Report, p. 162.

The *Indian Mirror* observes :—

"The Indian eats with undivided attention, and the voracious Brahmin hates and curses nothing so much as conversation in the course of his dinner, simply because it is an interruption and a culpable waste of time.... He has no rest, no breathing time till the entire programme is gone through. Eating is the alpha and omega of his dinners." 21st May, 1879.

It would be a great step for the father, mother, and children to have their meals together. This, perhaps, could not be recommended in a Government Reading Book, but an English home might be described, showing the advantages of such a custom. The next advance would be for near relatives, male and female, to meet together for social intercourse. The circle might be cautiously widened. Women should be taken to Museums, &c. By degrees, they may occupy the place in society which they do in Europe.

Sir William Muir has the following remarks on the seclusion in which Muhammadan women are kept :—

"The truth is that the extreme license of polygamy and divorce permitted to his followers by Mahomet rendered these safeguards necessary. Such license could not, without gross and flagrant immorality, be compatible with the free and open intercourse of European society. It would not in any nation be tolerated without restrictions which fetter and degrade the sex. On that account the introduction of Eu-

ropean manners and customs into Muhammadan society is altogether to be deprecated. The licentiousness of the *system*, without the present checks, cruel and unnatural as they are, would certainly create in Mussulman countries an utter dissolution of morality, already at a sufficiently low ebb."*

The sad condition of *Widows* should receive attention. Even when an old man is married to a mere girl, when the husband dies, the more ignorant put it down to the wife's demerit in a former birth. As a punishment, she has thus been made a widow early in life. The law legalising the marriage of widows might be explained, and some very carefully written remarks might be added, endeavouring to recommend the carrying out of its provisions.

The *Responsibilities of Knowledge*, and the *Duty of educated Hindus to their ignorant Countrymen*, should be pointed out. Directions should be given as to the mode in which such duties should be discharged. The cause of progress has often been injured by the imprudence and want of consideration of its advocates.

Moral instruction should be imparted in a variety of modes suited to the capacities of the pupils. Proverbs and pithy sayings, have their use. For young children, fables and parables are especially valuable. Anecdotes and historical sketches are other pleasing channels. Cogent appeals may sometimes be used, especially with pupils more advanced. To give somewhat of an oriental cast to the Reading Books, some use should be made of native works. Colebrooke has the following remarks on Hindu Literature :—

"The further our literary inquiries are extended here, the more vast and stupendous is the scene that opens to us; at the same time that the true and false, the sublime and the puerile, wisdom and absurdity, are so intermixed, that, at every step, we have to smile at folly, while we admire and acknowledge the philosophical truth, though couched in obscure allegory and puerile fable."†

The course to be pursued is to extract the gold and leave the dross. M. Elphinstone recommended that in reprints of native books by Government, "Passages remarkable for bigotry or false maxims of morality might be silently omitted, but not a syllable of attack on the religion of the country should be allowed."‡ It is essential to sound moral teaching that this recommendation be followed.

While there is no English work suitable for use in India, there

* Life of Mahomet, Vol. iv, p. 234.
† Quoted in *Edinburgh Review*, October, 1872, p. 469.
‡ Minute when Governor of Bombay. Quoted by Adam, p. 269.

are many which will yield valuable materials. But the most effective lessons would be written by men well acquainted with the feelings of the pupils, and able to sympathize with them in all their struggles and aspirations.

Poetry and Music.—The absence of direct religious instruction in Government Schools in India is deeply to be deplored. The question is, what is the next best substitute? The writer strongly recommends the free use of poetry and music in *Middle* and *Lower Class* Schools.

English poetry, it has been shown, is often not understood. At first it should be sparingly introduced, and the verses should be very simple. By degrees it becomes an instrument of great power.

Very easy vernacular poetry may be used from the commencement. One of the greatest educational wants of India is a collection, in each language, of good simple poetry, of an improving tendency, suitable for children. The Dravidian nations are utterly at fault in this matter. Their poetry for children is unintelligible even to adults without elaborate commentaries. The last Madras Public Instruction Report says:—

"All the literature in this Presidency is written in an artificial dialect, which is rarely, if ever, mastered by the student, and which never has been and never can be understood by the mass of the people. It is notorious that a young man, who has taken his degree, cannot take up and read at sight a vernacular poem which he has not previously studied, and that at the end of a few years, or even months, he is actually unable to understand the very poems in which he has passed his examination. . . . I must confess that the study of vernacular literature, in the form in which it now exists, seems very analogous to compelling every boy in England to go through a graduated course of Anglo-Saxon Chronicles and Romances in Norman-French."

False models are thus held up to imitation, and some of the latest Tamil poems are as difficult as those composed during the eleventh century. A fair Tamil prose style has now been secured; but in Telugu prose the native scholars still contend for archaic forms and poetical changes, rendering it unintelligible to many readers.

Dr. Caldwell says, that "The permutations which the Tamil grammar requires or allows are at least twice as numerous and more than twice as perplexing to beginners as those of the Sanskrit." Probably the poetry of Sanskrit-derived languages is simpler than the Dravidian.

The production of poetry suitable for schools should be encouraged in every possible way. As it is a comparatively untrodden path, some sort of guide should be afforded at the commencement. Suitable English poetry might be indicated as

models for *transfusion*. The spirit only should be given, and free adaptation to India should be enjoined.

The following may be mentioned as suitable *Songs of the Affections* :—

My mother,
I must not tease my mother,
What does little birdie say?

My father, my mother, I know,
Be kind to each other,
The God of heaven is pleased to see,
Children do you love each other?
Whatever brawls disturb the street,
O call my brother back to me,
Home, sweet home.

Truthfulness, honesty, industry, &c. :—

The truthful boy,
Oh! never deceive,
Oh, 'tis a lovely thing for youth,
Why should I deprive my neighbour
How doth the little busy bee,
'Tis the voice of the sluggard,
Try, try, try, again.
Never say fail!
How proud we are, how fond to show,

Kindness to all, &c.

Who is my neighbour?
I ask not for his lineage.

Loyalty :—

Hurrah! hurrah for England,
God save the Queen.

God's wisdom and goodness in Creation :—

God made the sky that looks so blue,
I sing the Almighty power of God,
Lord, I would own thy tender care,
Morn amid the mountains,

See the shining dew drops,
All things bright and beautiful,
Lo, the lilies of the field,
I praised the earth in beauty seen,
God might have made the earth bring forth,
The spacious firmament on high.

Death and Heaven :—

Leaves have their time to fall,
Friend after friend departs,
There is a calm for those who weep,
The Better Land.

Duty to God should not be overlooked.—The following are inserted by Babu Peary Churn Sircar, who may be regarded as a good authority as to Hindu feeling :—

Art thou my Father? Let me be,
A meek obedient child to thee;
And try in word, and deed, and thought,
To serve and please Thee as I ought.

Art thou my Father? I'll depend
Upon the care of such a friend;
And only wish to do and be,
Whatever seemeth good to Thee.

Art thou my Father? Then at last
When all my days on earth are past,
Send down and take me in thy love,
To be thy better child above.*

A CHILD'S MORNING PRAYER.

I thank the Lord, for quiet rest,
And for Thy care of me:
Oh, let me through this day be blest,
And kept from harm by Thee.

Oh, let me love Thee; kind thou art
To children such as I;
Give me a gentle, holy heart,
Be thou my Friend on high.

Help me to please my parents dear,
And do, whate'er they tell;
Bless all my friends, both far and near,
And keep them safe and well.†

---

* Third Book, p. 72.
† Second Book, p. 23.

EVENING HYMN.

And now another day is gone,
I'll sound my Maker's praise;
My comforts every hour make known
His providence and grace.

But how my childhood runs to waste!
My sins how great their sum!
Lord, give me pardon for the past,
And strength for days to come.

I lay my body down to sleep:
God's hand is o'er me spread,
And, through the hours of night, can keep
All danger from my bed.

With cheerful heart I close my eyes;
For God is still above;
And in the morning let me rise,
Rejoicing in His love.*

In "The Boy's First Book of Poetry," edited by "Peary Lall Shome," the following evening hymn, attributed to Coleridge, is inserted:—

Ere on my bed my limbs I lay,
God grant me grace my prayers to say:
O God! preserve my mother dear
In strength and health for many a year;
And O! preserve my father too,
And may I pay him reverence due;
And may I my best thoughts employ
To be my parents' hope and joy;
And O! preserve my brothers both
From evil doings and from sloth,
And may we always love each other,
Our friends, our father, and our mother;
And still, O Lord, to me impart
An innocent and grateful heart.

Both Hindus and Muhammadans will approve of the above. The only protest will come from Bradlaugh and his followers, who should not be allowed to regulate Government education in India.

There should also be a variety of school songs, *e. g.*

Children go,
Twinkle, twinkle, little star,
Work while you work,
There is a bird of plumage rare,

* Third Book, p. 16.

I'll never hurt my little dog,
How beautiful is the rain.
River, river, little river,
Well may fare the cotton tree.

There is an English song, "Weave, brothers, weave." Corresponding songs are required for India, for gardeners drawing water, for boys driving cattle home, for women weeding, harvest songs, wedding songs, &c.

Most of the English originals proposed for translation contain ideas equally intelligible all the world over. Any peculiarly English should be altered. An oriental air will be given to them by adapting them to favourite *native tunes*. This is of great importance. Every civilized people has its national music which it prefers. Another argument is that it is more easily taught.

Sufficient attention has not yet been paid to Indian music. The favourite tunes in each language should be carefully collected. Some are apparently common to different parts of the country, but probably others are peculiar.

The late Rev. J. Parsons prepared a collection of Hindustani airs in European notation.* Two or three works have been published in Bengali. The writer has seen a Telugu book on native music, probably translated from the Sanskrit. The notation resembles what is called Curwen's system in England.

Some of the native airs are very beautiful. The favorite children's hymn, "There is a happy land," is sung to an Indian air.

Still, while a commencement should be made with native tunes, a knowledge of suitable European music should gradually be introduced. Though the latter is not appreciated by the common people, children who have been taught both kinds of music not unfrequently prefer European tunes. In examining vernacular Mission Schools, the writer has often said to the children, "Sing two or three of the tunes you like best." In South India, a Tamil hymn adapted to the tune, "We won't go home till morning," has had perhaps most votes. Of course, the Tamil hymn had no association with the English words. There are favourite children's hymns which have made the circuit of the globe, translations being sung everywhere to the same airs.

Prizes should be offered for the best poems suitable for schools. Intelligibility must be specially insisted upon. It may be objected that poetry cannot be written to order, but though the first attempts may be poor, attention will be directed to the want, and really good poetry will eventually be obtained.

* Printed at the Medical Hall Press, Bombay.

To awaken some pleasing poetry of a wholesome tendency, is of peculiar importance in India. Mr. Long says of Bengali songs: "The Bengali songs do not inculcate the love of wine, or like the Scotch, the love of war, but are devoted to Venus and the popular deities; they are filthy and polluting."*

The *Indian Mirror* bears similar testimony:—

"Is there no patriot to sing the glories of his country, the wrongs of his mother-land? No poet to paint in words the lilies of the field? Alas! no. Wherever you go, you are tired of hearing these wretched love songs which corrupt the young, the grown up and the old. The dancing girl, the music master, the lover of music, whoever that is known to sing, will be found to touch the same chord. Nor is any other sort of music felt generally desirable." 1st *March*, 1873.

The value of music as an instrument of moral instruction is thus shown by Laurie:—

"It is on the fact that it is a direct moral and religious agency that Music (by which is meant mass and part singing from notation) rests its claim to rank first among the subsidiary subjects of instruction. The united utterance of a common resolution of perseverance, heroism, love of truth and honesty, or of a common sentiment of worship, gratitude, or purity, in song suited to the capacities of children's minds and to the powers of children's voices, devotes the young hearts which pour forth the melody to the cause of morality and religion. The utterance of the song is, in some sense, a public vow of self-devotion to the thought which it expresses. The harmony of the singers falls back on the ear and seems to reiterate the sentiment with which the music has been associated, in accents pleasing and lenitive, not harsh and preceptive. The morality and religion of song thus drop gently, and without the parade of formal teaching, into the heart of the child, and in this form they are welcome.

"But Music is not only in itself a direct moral agency and a medium for direct moral teaching; it is also the best auxiliary to the other moral and religious instruction of the school, because it *repeats* what has been already conveyed in a dogmatic or illustrative form, and it does so with melodious and grateful associations, which suggest, if they do not reveal, the inner harmony of the spiritual life. Nay more, may we not say that the musical utterance of a sentiment suggests to the young mind the fundamental union of goodness, truth, and beauty—an union dimly apprehended it may be, but perhaps none the less deeply felt? If this be so, there are the beginnings of a true culture in school-music."†

Currie, one of the best English writers on education remarks: "Every good song which is made familiar to a school is a

* Bengal Records, No. XXXII, p. [illegible]
† Primary Education, pp. 123, 124.

pleasant and powerful source of influence over a large number in behalf of the virtue or sentiment which it embodies."*

In Government Middle and Lower Class Schools, the day may fitly begin with Literature and Morals, and close with Singing.

Arrangement of Subjects in Reading Books.

It may appear impossible to include in Reading Books all the subjects which have been mentioned. This depends upon the method in which they are treated. A rough estimate may be formed of the space available. The "School Board Readers" of Messrs. Griffin contain the following pages:—

1st stand.	2nd stand.	3rd stand.	4th stand.	5th stand.	6th stand.	Total.
96	128	160	192	256	320	1,152

Supposing Literature and Morals to receive five-eighths and Science three-eighths, the latter would have about 430 pages in the school course. If this space, equal to about five of the "Science Primers," were judiciously employed, some of the leading facts might be stated. The giving up the text books for the entrance examination would enable two additional Readers to be employed —one on Literature and Morals, the other on Science.

The allotment of space to each science would require much thought and judgment. The matter is complicated by the fact that scholars are continually dropping off. Some do not get beyond the Primer; others the Second Book: and so on. If a subject is not noticed at all till the highest Reader, only a small per-centage of the pupils will be benefited.

As already mentioned, in the *school* course, the object is scientific *information*, not *training*. The pupils should acquire sufficient knowledge to understand, in some measure, the allusions to science and art of every-day occurrence in the public journals. For this purpose a general acquaintance with the salient points of all, is preferable to a comparatively full knowledge of one or two of them. In the *University* course, the system would be the reverse.

The lessons on agriculture would be inserted in the Reading Book for village schools. In the Reading Book for Zenanas, the management of children and the preservation of health would receive special attention.

The poetry should be included in the Reading Books, but it would be convenient for the teacher to have what is suited for singing collected in a small volume.

The mode in which the lessons should be arranged in the Reading Books requires to be considered. Those on Literature and Morals should be intermixed. The question is about the

* Principles of Education, p. 464.

lessons on Science. They may be placed by themselves at the end of the book. In some respects this is the best course. The objection is that often books are read right through. Thus for months the pupils would have only Literature and for months only Science. This may be guarded against by a notice in the books to the effect that the lessons on Literature and Morals are to be read five days a week in the morning, and those on Science three times a week in the afternoon. For advanced students, the Literary and Scientific Class Books would be distinct.

GRAMMAR.

Perhaps no branch of instruction is worse taught than Grammar. A commencement in many cases is made with numerous dry definitions and rules, which are not thoroughly explained, and which the children do not know how to apply. The memory alone is exercised. Its study should not be commenced too early. The opinion expressed in the following extract is gaining ground :—

"M. Duruy, Minister of Public Instruction, in a circular to the Rectors of Colleges, recommends them not to torment their pupils by forcing them to commit to memory the abstract rules of grammar."

He says :—

"Children of 10 or 11 speak of transitive and intransitive verbs, simple and complex attributes, incidental, explanatory, or determinatory propositions, circumstantial complements, &c. One must have no notion of children's minds, which are averse to abstractions and generalities, to believe that they can comprehend such expressions which you and I have long since forgotten. It is simply an effort of memory, and not of the slightest use. If the serious study of grammar is of the utmost importance, if by an analysis of language we are led to discover certain laws of mind, if by a comparison of the construction of grammars among themselves we are led to find the affiliation of nations and races; if, in short, this study constitutes for a mind, already mature, one of the most fruitful applications of philosophy enlightened by history, it must be admitted that for children it is only too often an object of terror. Well, such lessons ought to be substituted. Grammar must be reduced to a few short and simple definitions, to a small number of fundamental rules, which can be illustrated by examples. It will be necessary, in proportion as the intelligence of the child becomes developed, to place before it extracts from our best literary works, to make it comprehend the different shades of meaning expressed by the words, the connection and sequence of ideas, and at a later period, the inversions and even the bold peculiarities of genius."*

Pattison says in his Report on German Schools :—

"An important step has been made by banishing grammatical

* Quoted in the Times, Dec. 9, 1866.

lessons, *i. e.*, the analytical mode of learning language, from the elementary school. In the classical school, grammar, as an elementary logic, subserves the chief purpose of such schools, viz., the training of the intellectual powers, and is, therefore, in place in such schools."

In primary schools language is to be taught as follows:—

"The mother-tongue must be learned in these schools practically by using it. It is not a knowledge to be studied, but a power to be exercised. The language instinct (sprachgefühl) which every child possesses must be cultivated by assiduous exercise, of which reading, speaking, writing are only so many various forms. The language instinct is the true guide through the intricacies of grammar."*

When properly taught, grammar is in many respects a very useful study. The mental discipline is of great value, serving the purpose of an "elementary logic."

A commencement should be made with oral lessons. No text-book on the subject should be used in *village* schools.

In English Schools, grammar is chiefly studied through the manuals of Bain, Morell, and other text-books published in England. The Lieutenant-Governor of the Punjab justly complains that, "No Grammar exists by which English can be easily and intelligently learned by a comparison of the differences in idiom and construction between English and the Vernacular of the scholar."† Two or three grammars on this principle, adapted to different stages, are very much wanted.

In the University course it would be very interesting and useful for the students to trace the decomposition of Sanskrit into the modern vernaculars of Northern India, and acquire some acquaintance with the "Science of Language", which Max Müller has made so fascinating. The connection between the Indo-European languages would thus be shown. The aid of Professor Cowell might be sought.

GEOGRAPHY.

Macaulay says:—

"The importance of Geography is very great indeed. I am not sure that it is not of all studies that which is most likely to open the mind of a Native of India."‡

It has already been mentioned that the study is not valued by the people generally. The Bengal Director says:—

"History, geography, and science they commonly regard as so much useless lumber which they are content to stow away with waves of real

* Education Commission, 1881. Report, vol. iv, pp. 232, 233.
† Punjab Public Instruction Report, 1871-72, p. 4.
‡ Bethune Society's Transactions, p. 286.

value, simply because an inscrutable government will not aid them to obtain the latter without the former."*

It is only very recently that geography has been taught in England on rational principles. The old course was to begin by attempting to stuff the whole globe, scored with mathematical lines, into the poor child's head. Professor Huxley says, "I doubt if there is a primary school in England in which hangs a map of the hundred in which the village lies, so that the children may be practically taught by it what a map means."† There is gradual improvement. Penny county geographies, with maps, are getting more and more into use.

Of course, a beginning should be made with the school-room, and the circle should be gradually widened. A child should get a good knowledge of his own zillah and presidency. A more general knowledge of India as a whole, Asia, Europe, &c., will follow.

Canon Moseley remarks :—

"It is a great achievement to present vividly to the mind of a child the isolation of the earth in space, to disabuse it of the impression that its surface is an infinitely extended plain, or an island floating in the abysses of space, or the summit of a mountain whose base reposes in some fathomless regions unknown to us—to convince the child that the world rests upon no pedestal, hangs upon nothing, floats in space, not being buoyed up and not being supported does not fall."

More lists of names are soon forgotten. The aim should rather be to give vivid ideas of the physical features of the earth and of the inhabitants of the different countries.

Isaac Taylor says :—

"A child is to be led on until he breaks over his horizon; he is to be exercised and informed until he can wing his way north or south, east or west; and can show in apt and vivid language that his imagination has actually taken the leap, and has returned—whether it be from the tempest-tossed Hebrides, or the ice-bound northern ocean, from the red man's wilderness of the west, or from the steppes of Central Asia; from the teeming swamps of the Amazon, or the Siroccoo deserts of Africa, or from the tufted isles of the Pacific, or the burning flanks of Etna, or the marble shores of Greece.

"But besides going through the characteristic scenes of the four continents, as a traveller does; we must take the earth as a whole, or as a planet, and aid the mind in looking at it as from a point of view whence it might be seen, spinning on its axis, cloud-mottled, snow-tipped, with its bulging tide-wave, heading on daily from the equatorial Atlantic to the northern straits; with its steady monsoons, and its

* Bengal Public Instruction Report, 1869-70, p. 42.

† Lay Sermons, p. 58.

angry tornados, its fire-spitting craters, its verdant and swarming patches of life, and its arid expanses of sand."*

The following text-books are necessary :—

Geography of the Zillah.—This should always be taught first. The home County Geographies would furnish models.

Geography of the Presidency.—In Bengal, only one of each of the three great divisions of the Presidency will come under this head.

Geography of India.—At least two text-books will be required, one for elementary schools, one for advanced students. The latest Geography of India, by Mr. Blochmann, is admirable, though probably it bristles too much with figures and some unimportant names might be omitted with advantage.

General Geography.—Here also text-books of different grades are indispensable. Young children should not be offered a dish of bones, as is too often the case.

Maps and Atlases.

Maps are requisite to teach geography. English maps are easily procurable; the difficulty is about those in the vernaculars. Different attempts have been made to supply vernacular maps; some by government, some by societies, some by individuals. The failure has been to combine cheapness with excellence. Some maps are cheap, but the execution is wretched; a few are good but expensive.

As already mentioned, the first map required in a school is one of the Zillah. Such maps will be numerous, and the demand for each will be comparatively small. They can be lithographed in India, but their preparation should be intrusted to competent men. Some of those published are very unsuitable.

In addition to Zillah maps, village schools will require the following :—

Map of the Presidency or great sub-division.

Map of India.

Map of the Hemispheres.

Vernacular Town Schools should have, in addition, maps of Asia and Europe. Schools of a higher grade require a complete set of maps.

It is very desirable that Government should secure the publication of a good and accurate set of maps. Even if the supply should eventually be left to private enterprise, it is important at the outset to furnish good models.

The following plan was recommended by an eminent map

* Home Education, pp. 272, 273.

publisher in London, Mr. Stanford, who has prepared the beautiful series of maps issued by the Christian Knowledge Society:—

First, let very accurate outlines be engraved on copper, but without *names*. Next let the English Maps be prepared by transferring the outline to paper, and filling in the names. The English Editions would thus be furnished, accuracy being combined with cheapness.

Next, let specimens of the English Maps and copies of the outline Maps be sent out to each Presidency, and let the corresponding Vernacular names be filled in by the most competent persons in the Surveyor General's Office. Great care should be taken about the shape of the letters and the spelling. The maps, when filled in, should be sent to London, and the names by careful tracing, or otherwise, transferred to the stone. Nagri can already be copied very fairly. There will be more difficulty about one or two complicated characters, like Telugu, not known; but this will soon be overcome. The first editions should be small; corrections can afterwards be made if required.

There will be a continuous and growing demand for maps. It is best to send out annual supplies. Paste is very liable to be affected both by the climate and insects. The latter may be partially guarded against by mixing a small quantity of corrosive sublimate with the paste. Still, new maps are much better than those which have lain in store for years.

To enable comparatively small editions to be printed off, as well as to avoid much labour and expense, the zinc plates, or stones, containing the maps should be preserved. The first cost is trifling, and there is a very great saving in the end.

The *size* of the Maps deserves consideration. As the average number of children in a vernacular school does not exceed forty, only about one-half of whom study Geography, it is evident that large maps are not required. They are more expensive, and they are more liable to tear when exposed to the gusts of wind which often sweep through vernacular schools. If possible, maps should be of one large sheet; pasted pieces are apt to give way.

Atlases are valuable for home study. An English Atlas for beginners, with good colored maps, can be supplied for sixpence or even less. Vernacular Atlases might be prepared on the same plan as that mentioned for maps. Exclusive of the first cost, they might be furnished at very low rates. Single maps might be sold, like the penny maps at home.

A *Terrestrial Globe* would be very useful. The expense is the great difficulty; but perhaps one might be prepared sufficiently cheap to be available. Some of the boys attending the village

schools of the Rev. J. Long, south of Calcutta, have made neat globes out of cocoa-nuts, with paper pasted on them.

HISTORY.

It is well known that the Hindus have no history, properly so called. Professor Cowell has the following remarks on this subject:—

"The Hindu mind turned away from all the sympathy of life and its objects, to lose itself in a past which never was a present. Hence we have no such thing as Indian history. ... The very word history has no corresponding Indian expression. In the vernaculars derived from the Sanskrit we use the word *itihás*—a curious compound of three words, *iti, ha, asa*, which almost correspond in meaning to our old nursery phrase, 'There was once upon a time.' In Sanskrit authors, the name means simply a legend. ... From the very earliest ages down to our own day, the Hindu mind seems never to have conceived such an idea as an authentic record of past facts based on evidence. It has remained from generation to generation stationary, in that condition which Mr. Grote has described so vividly in the first two volumes of his 'History of Greece.' The idlest legend has passed current as readily as the most authentic fact, nay, more readily, because it is more likely to charm the imagination; and, in this phase of the mind, imagination and feeling supply the only proof which is needed to win the belief of the audience."*

The study of history is valuable as a corrective to this state of things. The history of India properly written, would tend to promote good feeling between the two races and inspire loyalty towards our Government. The *Imperial Review* remarks:—

"The unpopularity of English rule in India is a cause of much wonder and speculation to people who have no personal acquaintance with the East. They are fond of contrasting the equity of our rule with the oppressiveness and rapacity of the extinct dynasties; but they overlook the fact, that the present generation of our Eastern subjects have not the means of instituting such a comparison. The greater part of them have had no experience of any dynasty but our own, and are not possessed of any historical information, wherewith to supply this lack of knowledge."

A good history would show the great blessings the British Government has conferred upon the people of India.

Much dissatisfaction has been expressed of late with regard to School Histories in England. Huxley says, "We must have History, treated not as a succession of battles and dynasties; not as a series of biographies; not as evidence that Providence has always been on the side of either Whigs or Tories; but as the

* Inaugural Lecture, pp. 10, 11.

development of man in time past, and in other conditions than our own."*

Herbert Spencer says:—

"Scarcely any of the facts set down in our school histories, and very few of those contained in the more elaborate works written for adults, give any clue to the right principles of political action. The biographies of monarchs (and our children commonly learn little else) throw scarcely any light upon the science of societies. Familiarity with court intrigues, plots, usurpations, or the like, and with all the personalities accompanying them, aids very little in elucidating the principles on which national welfare depends. We read of some squabble for power, that led to a pitched battle: that such and such were the names of the generals and their leading subordinates; that they had each so many thousand infantry and cavalry, and so many cannon; that they arranged their forces in this and that order; that they manœuvred, attacked, and fell back in certain ways; that at this part of the day such disasters were sustained, and at that such advantages gained; that in one particular movement some leading officer fell; while in another a certain regiment was decimated; that after all the changing fortunes of the fight, the victory was gained by this or that army; and that so many were killed and wounded on each side, and so many captured by the conquerors. And now, out of the accumulated details which make up the narrative, say which it is that helps you in deciding on your conduct as a citizen?"

He adds:—

"Only now, when the welfare of nations rather than of rulers is becoming the dominant idea, are historians beginning to occupy themselves with the phenomena of social progress. That which is really concerns us to know, is the natural history of society. We want all facts which help us to understand how a nation has grown and organised itself."

The relationship of the so-called Mlechchas and Hindus should be shown. Max Muller says:—

"The terms for God, for house, for father, mother, son, daughter, for dog and cow, for heart and tears, for axe and tree, identical in all the Indo-European idioms, are like the watch-words of soldiers. We challenge the assuming stranger; and whether he answer with the lips of a Greek, a German, or an Indian, we recognise him as one of ourselves. There was a time when the ancestors of the Celts, the Germans, the Slavonians, the Greeks, and Italians, the Persians and Hindus, were living together within the same fences, separate from the ancestors of the Semitic and Turanian races."†

History confirms the following sensible remarks made by a

* Lay Sermons, p. 53.

† Sanskrit Literature, p. 11.

Bengali, Mr. Monomohan Ghose, at a recent meeting of the Bethune Society, Calcutta:—

"He (Mr. Ghose) felt a legitimate pride in the ancient civilization of India; but he was forced to say that an undue and exaggerated veneration for the past was doing a great deal of mischief. It was quite sickening to hear the remark made at almost every public meeting that the ancient civilization of India was superior far to that which Europe ever had. Even if this assertion was based upon well ascertained facts, which it was surely not, it was only calculated to fill the speaker's mind with sorrow and shame, having regard to the present state of the country. It must be admitted by all who had carefully studied the ancient literature of India, that the much-vaunted civilization of India was of a peculiar type, and that it never could bear any comparison to what we call modern European civilization. Whatever might have been the case in ancient times, he thought that this frequent appeal to an ancient civilization could serve no good purpose at the present day, while it was simply calculated to make the Bengalis more conceited than they were."

Sir Henry Elliott's Muhammadan Historians of India would be valuable for the period of which they treat. Macaulay's graphic sketch of the ravages of the Mahrattas might be turned to account, *e. g.*

"Every region which was not subject to their rule was wasted by their incursions. Wherever their kettle-drums were heard, the peasant threw his bag of rice on his shoulder, hid his small savings in his girdle, and fled with his wife and children to the mountain or the jungle, to the milder neighbourhood of the hyæna and the tiger. Many provinces redeemed their harvest by the payment of an annual ransom. Even the wretched phantom who still bore the imperial title stooped to pay this ignominious black-mail. The camp-fires of one rapacious leader were seen from the walls of the palace of Delhi; another, at the head of his innumerable cavalry, descended year after year on the rice-fields of Bengal."

Three *School* Histories of India are required. A sketch of about one hundred pages for Village Schools, a volume of about double that size for Town Schools, and a still larger text-book in English. Histories for Colleges may be left to private enterprize.

The History for Village Schools should include only the salient points. It should not be condensed too much so as to be dry; but should rather omit events of less importance.

General History.—In the majority of primary schools the only history that can be taught will be that of India. Some of the pupils in the better class of schools will be able to take up another work on history. In some respects the History of England has the next claim, but, on the whole, a sketch of General

History, with a large proportionate space to England, seems preferable. It should be rather brief graphic sketches of the principal periods than connected narrative.

Isaac Taylor says:—

"We should present in succession and actually pictured as well as verbally described—the Egyptian Pharaoh, and his magicians—the Persian Magi, and the Cyrus (the Shah of three thousand years ago); then the heroes of Homer's Romances, and the real warrior statesmen of Athens, Sparta, Thebes, Macedon. Next in solemn procession come the Ptolemies, and the Antiochuses; along with the Jewish Pontiff and the Rabbin. The consuls, the dictators, the orators, and the emperors of Rome, first western, and then eastern, bring up the train of dramatic persons of ancient history. In more lively and picturesque guise, advance the troop of European actors, including the popes, the abbots, the monks, the bishops, the barons, and the Scandinavian chiefs; the knight of the crusades, and the Templar, with his companion Saracen; the bard and troubadour, the pilgrim, the burgeoids, the buccaneer; and the more modern representatives of each."

The progress of civilization should receive special notice.

Stream of History.—A chart of this description, to be hung up in schools, would be of great value.

ARITHMETIC.

The Report of the Schools Inquiry Commission says of Arithmetic:—

"The demand of the parents for thoroughly good arithmetic appears to us to be one which must be satisfied, whatever else has to give way to it. Both for its utility and for its educational power, nothing else can stand in its place. It has not of course the breadth which belongs to the study of language. But it has still greater power of exercising the reasoning faculties, and is the gate-way, not only to all natural science, but to a very large part of men's dealings with each other." p. 29.

Of the three R's, arithmetic is most valued by the people of India. The popularity of a school depends largely upon the success with which it is taught.

Our system of teaching arithmetic is not appreciated, and rightly so. It deals too much with abstract numbers. What may be called catch questions are often put, as 205002×1010, which scarcely ever occur in practice, while those which would be of use in every day life are neglected. The instructions to English inspectors as to examinations in arithmetic justly remark: "It is doubtful whether large numbers which never occur in the range of their daily experience suggest any idea to the children

of our public elementary schools; they belong to the statistician and the astronomer."*

The native arithmetic has serious defects but it affords some quick methods of solving many questions which are of frequent occurrence in the bazaar. The following description is given of the arithmetic taught in indigenous schools in the North-West Provinces:—

"The book-keeping of retail dealers, and the forms of banking business, which include the writing and reading of letters of advice and other correspondence, and agricultural accounts, which involve the measurement of land, the calculation of rent, the modes of recording demands, receipts and balances, and the other duties of the Patwari, form the utmost extent of learning imparted. In almost every school the Bunniah's system of accounts is taught first, and as the foundation of the rest; to this, when they are required, are superadded the Mahajna's forms of business; and village accounts are generally confined to the smaller villages in the country, where they are required for Zemindars' children, or for others who are likely to have charge of any landed concerns."†

The following remarks by the Hon. W. Seton Karr deserve attentive consideration:—

"These (indigenous) schools do supply a sort of information which ryots and villagers, who think at all about learning to read and write, cannot, and will not do without. They learn there the system of Bunneah's accounts, or that of agriculturists; they learn forms of notes-of-hand, quittances, leases, agreements, and all such forms as are in constant use with a population not naturally dull and somewhat prone to litigation, and whose social relations are decidedly complex. All these forms are taught by the guru *from memory*, as well as complimentary forms of address. On these acquirements, the agricultural population set a very considerable value. I think that we ought not too much to consider whether such attainments are really valuable. All I know is, that they are valued; and it is the absence of such instruction as this which, I think, has led to the assertion, with regard to some districts, that the inhabitants consider their own indigenous schools better than those of Government.

"I would have all *forms of address* and of business, all modes of accounts, agricultural and commercial, collected, and the best of their kind printed in a cheap and popular form to serve as models. I would even have the common summons of our Criminal or Revenue Courts printed off."‡

Pattison says of the teaching of arithmetic in elementary schools in Germany:—

"Setting sums to work in abstract number is to be done as little as

* Report of Committee of Council on Education, 1871-72, p. cxx.
† Muir's Report on the Indigenous Schools of Futtehpore, 1846, p. 10.
‡ Records of Bengal Government, No. XXII, p. 43.

possible; in the lower class to be altogether avoided. The examples should be always in concrete number."*

Laurie thus complains of the teaching of arithmetic in England:—

"As matters stand, the exercises worked by the pupils have, for the most part, immediate or sole reference to the attainment of a certain familiarity with the relations of number in themselves, and with the rules under which the exercises happen to be ranged; they ought, on the contrary, to bear with the greatest stress on the relations of number to every-day affairs. School-arithmetic is not a playing with numbers, but a dealing with the things to which number is attached. If it be not a playing with numbers, much less is it an intricate game with figures."

He shows how arithmetic may be turned to account in promoting economy and foresight:—

"But we have to point out a still more important purpose which the teaching of the relations of number as Economic Arithmetic subserves. Economic Arithmetic, properly taught, must rest mainly on that class of questions which concerns clothes, feeding, housing, and foresight. The constant reference of figures to the acts, facts, and dealings of every day life, thus brings Number to bear on subjects which are, in truth, moral, inasmuch as they have to do with a man's relations to his household and his occupation. It is evident that the familiarising of the mind with the important part which number plays in ordinary affairs will promote what may be called arithmetical prudence in the management of the personal and family getting and spending. The expenditure of the operative classes has, in the vast majority of cases, not the slightest regard to present or future responsibilities. If we can get a man to consider seriously how he can best extend the benefits of his earnings to those of his own household, the economic object of education in him is fully attained. But this deliberation is the one thing desiderated. If this be secured, he will quickly see that although saving is a duty, it does not mean niggardliness. He will perceive that a regulation of expenditure with due regard to the income, and to the various *present* claims which a man has on himself or which others have on him is economy, and it is more; it is also benevolence, humanity, justice, and sense. Now, these things ought to be taught to the people, and they are scarcely ever taught. This subject has been already adverted to in general terms, and it will be spoken of again under the head of Direct Moral Instruction; but we wish specially to show in this place, that even a study apparently so abstract as arithmetic can be so taught as to reveal an intimate connexion with the conduct of life, and that *it is best so taught*. And further, that arithmetic ethically taught in this its *economic* sense, is moral teaching, and that, while it confessedly contributes very largely to the discipline of the intellect, it also to some extent aids

* Education Commission, vol. iv., p. 385.

in the formation of a moral habit of mind. It thus promotes the ultimate object of the primary school in both its aspects."*

Practical Mathematics.

Following the custom in England, Euclid is very extensively studied in India. There is every reason to believe that the time thus employed might be turned to better account. The Report of the Schools Inquiry Commission contains the following:—

"Euclid is almost the only text-book now used in England for teaching geometry. There is reason to fear that it is not well taught, that boys are pushed on too fast and too far, without thoroughly comprehending the earlier parts of it, and that too much time is given to the mere text, without illustrations or applications; and it is quite certain that if geometry be a most valuable instrument of mental discipline when thoroughly understood by the learner, its value is absolutely reduced to nothing if the comprehension of it be hazy or loose. But we think that it is well worth consideration whether Euclid be the proper text-book for beginners, and whether boys should not commence with something easier or less abstract. Mr. Griffith, the Secretary to the British Association, stated that in his opinion too much time was given to Euclid, and that many boys had read six books of it who knew nothing of geometry; and Professor Key went so far as to express a wish to get rid of Euclid altogether as a most illogical book. The French and German schools have long disused it altogether. The English evidence does not, on the whole, go to this effect; but the facts seem to justify the opinion that in teaching geometry it would be well to spend much more time on the earlier parts, and perhaps to let the practical application to a great degree precede the strictly scientific study. Mr. Fearon found the Scotch High Schools much superior to the average English Schools in mathematics, and he ascribes this to the practical turn given to their mathematical teaching. Practical applications, being less abstract, are much more easily within the reach of average intellects, and there may be some who can study these with great profit and yet cannot attain to the abstruser parts of the science; and even clever boys would probably be the better if their study of Euclid were preceded by that of mensuration and practical geometry." pp. 30, 31.

The course recommended might be carried out with great advantage in India. The comprehension of Euclid by students is undoubtedly often "hazy or loose." Practical geometry, &c., might be made much more intelligible, while it is often useful to be able to ascertain the extent of a field, or to calculate the quantity of earth which must be excavated in digging a well of certain dimensions.

Writing.

This branch is greatly valued by the people. Formerly much

* Laurie's Primary Instruction, pp. 109, 112-114.

more time was devoted to it in schools of a higher grade than at present—success in the University examinations depending on other acquirements. Sir George Campbell has very properly called attention to its neglect.

It has been stated that the indigenous schools follow the excellent plan of teaching reading and writing simultaneously. Sand, boards, or leaves are the materials used. Babu Bhadev Mukerji advocates a continuance of this plan in patshalas:—

"It is scarcely necessary to add that no alterations must be made in the writing materials hitherto in use in the village schools. Even if the chalk, palm and plaintain leaves have nothing else to recommend them, their cheapness, in fact their absolute want of any assimable price in the villages, must still recommend them to the poorer classes, who will find slates and pencils too costly, both in their price and in their liability to breakage."*

Still, copy books may be used in the higher classes of vernacular schools. It is desirable to have a graduated series of writing lessons in the vernacular similar to those in use at home. Eventually copies with printed headings may be prepared. At the same time, teachers should make much use of the blackboard in writing lessons. The attention of pupils can thus be more readily drawn to their mistakes.

The recommendation of the Hon. Seton Karr to teach letter writing, simple legal notices, &c., has already been quoted (p. 84). The Calcutta School-Book Society has published a "Book of Letters," also "Legal, Commercial and Zemindary Forms." This has likewise been done in the North-West Provinces. It is very desirable that corresponding books, with the necessary modifications, should be prepared in all parts of the country. By giving a practical turn to education, it will be much more valued. Advanced scholars may write out such forms.

DRAWING.

In the present stage of India Education, this branch cannot be expected to receive much attention. Still, probably one lesson a week might be substituted for writing without any disadvantage to the latter, while it would be of some practical use, and tend to refine the taste. The "Penny Drawing Books" would furnish very cheap models, though oriental design should not be overlooked.

SINGING.

This has already been noticed under the head of Moral Instruction.

* Bengal Public Instruction Report, 1860-64. Ap. A., p. 371.

Pattison states that in Prussian Village Schools, out of 26 hours a week, three are allotted to music. In the Town Schools, two hours are generally allowed. In Vernacular Schools in India, the children might receive a daily lesson in singing of about twenty minutes. Care should be taken to explain the meaning of what is sung. English tunes may be taught in English *Schools*—not *Colleges*. Barnard mentions that in the Royal Gymnasium of Berlin there are five classes for music, each receiving about two hours instruction weekly. "The proficiency is indicated by the fact that the pupils perform very creditably such compositions as Haydn's 'Creation' and Handel's 'Messiah'."*

The grand difficulty urged will be, who is to teach singing? Progress, it is admitted, must be slow. The first steps are to collect the best popular tunes and secure appropriate poetry. Singing should be made a subject of instruction in all the Normal Schools, and a knowledge of it would gradually spread. The German headmaster of a Government School at Merkara, enthusiastically fond of music, has been so successful in teaching his pupils, that now the Coorg Hills often re-echo the sound of German melodies, associated with English or Vernacular words.

ILLUSTRATIONS.

Moseley remarks:—

"The teaching power of pictures not only for infants but for older children, is not, I think, duly appreciated. If the reading lesson books were profusely illustrated with prints of the inhabitants of different countries, their dwellings, the characteristic forms of vegetation, &c., and generally of such objects as are usually pictured in books of travel, and if the historical parts of the book were illustrated on a similar principle, and so of every other subject (manufacturing processes for instance), the effect upon our schools would, I think, well repay any cost which it might create."†

The people are fond of pictures. Marshman says of the early productions of the Bengali press: "Many of these works have been accompanied with plates, which add an amazing value to them in the opinion of the majority of native readers and purchasers."‡

Most of the Government School Books in India are entirely without illustrations. Some of the Government Vernacular School Books in the North-West Provinces have a few hideous woodcuts. The Marathi Series of the Bombay Government has some only a shade better, as those in the First Book,§ while

* Education in Europe, p. 160.

† Minutes of Committee of Council on Education, 1847-48, Vol. I., p. 83.

‡ Quarterly *Friend of India*, No. 1, p. 198.

§ See also the picture of a Cat at page 128 of the Third Reader.

others are fairly creditable. The latter were probably supplied by the School of Arts.

Two kinds of illustrations are required—small woodcuts for books and large pictures to exhibit to classes.

Woodcuts for books should be small in size, for economy of space; but they should be as clear and accurate as possible. Perspective and backgrounds are generally not understood by the common people. In their own books the illustrations are often little more than outlines. A little shading may be added, but not much. Printing has to be taken into account. It is far more difficult to bring out woodcuts clearly than ordinary letter-press. In the vernacular editions this has to be considered.

The original woodcuts should be from the best photographs, where available, and executed in the first style of art. This would involve some expense at first, but electrotypes could be supplied to all parts of India at very low rates. The cost, on the whole, would be much less than engraving blocks at each of the Presidencies, while the workmanship would be far superior.

The subjects for woodcuts will readily suggest themselves. It may only be mentioned that the physical features, the ethnology, and remarkable buildings of India should receive special attention.

Some large coloured illustrations to explain lessons in science and the arts would be valuable, and compensate, to some extent, for the want of apparatus. Where the school houses are good, they may be hung up on the walls. In village schools, where they could not thus be protected from the wind and dust, they might be kept in a portfolio. Only a few would require to be specially prepared for India. A selection from those available at home would answer most purposes.

SCHOOL APPARATUS.

The remarks of Mr. Woodrow on the ability of the Hindu to obtain good results with small means, have already been noticed. With regard to schools he says:—

"Even now in some schools, a round earthen pot, costing one farthing, serves for a globe; a black board is made of a mat stiffened with bamboo splints and well plastered with cow's dung. The brown surface thus produced answers all the requirements of a blackboard. If the walls of the school-house are made of mud, and washed as is usual in Hindu houses with cow's dung, the whole wall serves as a black board and can be renewed every other day. I expect to see the time when these brown surfaces will be universal in Bengali School rooms. The boys who draw maps make their own ink from charcoal, and their paint from jungle plants. They also glaze the maps by rubbing them with a smooth stone."*

* Bengal Public Instruction Report, 1869-70. APPENDIX I, p. 29.

While such ingenious substitutes are to be encouraged, where practicable, inexpensive appliances of a superior character should be afforded.

Reference has already been made to some of the apparatus most required in elementary schools:

1. A Black-board.
2. Sheet Lessons for beginners.
3. A supply of Maps and a Globe if possible.
4. Illustrations and Objects for Object Lessons.
5. Writing Models.

One or two other requisites may be noticed.

School Registers.—In indigenous schools the attendance is not marked. In schools under European supervision Registers are pretty generally used. Usually they are ruled by the teacher on a few sheets of paper. Time is thus occupied; often they have a slovenly look; while the form adopted is not the best. Government might provide printed School Registers on a uniform plan. Considering the number required, they might be furnished at little more than the cost of the paper. They would be a great boon to schools.

Sun Dials.—To follow time-tables, it is necessary for teachers to know the hours. Schools of a better class will have clocks, which, of course, are far the best. A home inspector says: "I may notice by the way that that important regulator of work, the school clock, is hardly ever going. Indeed, when I find it in active operation I am struck with astonishment."* There is much greater difficulty in India in getting clocks cleaned or repaired. In open village schools, there is even no place to keep them safely. Sun dials may serve as an inferior substitute. Very cheap ones should be prepared and supplied to schools.

Log Books are now used in schools at home. It seems desirable to require teachers in India to enter monthly the studies of each class, giving the titles of the books and the number of pages read. This would promote diligence on the part of the teacher, and an inspector could judge better of a school.

Small *Libraries* would be useful to some extent in superior schools. In primary schools they would not be used. The Board of Education for Massachusetts took up the establishment of "District School Libraries" with great zeal; but the Twenty-fifth Report states that "the scheme after a fair trial and ample encouragement, proved a failure." (p. 51).

School Houses and Furniture.—Dr. George Smith proposed that a meeting of the Directors should be held, among

* Report of Committee of Council in Education, 1862-63, p. 90.

other purposes, "to suggest the best and cheapest school-house and furniture fitted for schools of each grade."

Indigenous schools generally meet in verandahs, in parts of temples, sometimes in mere sheds or in the open air. Dr. Fallon thus complains of some of the school-houses in Behar:—

"Our School-houses, the best of them, are simply cattle-sheds, without a second room, doors or verandahs. The rain beats in on every side, and dust storms deposit dust an inch thick. Of such even we have but one or two in each district. By far the greater part are only open verandahs and bunnias' shops, hired at two rupees a month, the rain pouring through the roof, and mud and rain driven in from all sides, with nothing but a thin grass shed, just enough to afford shelter from the direct rays of the sun at midday. Such are the School-houses which, measuring only 12 feet by 4, permit neither orderly distribution of classes nor effective supervision by the teacher, to say nothing of exposure to the weather."*

A gradual improvement in school-houses is taking place. An energetic prudent teacher will often be able so to interest the parents, that assistance may be obtained to aid at least in the erection of a school-building. Good plans are a great desideratum.

Dr. G. Smith in his Report on the Indian Educational Collection remarks:—

"Few of the educational appliances in the European Collection are suited for a country so poor, so bad, and so differently situated in other respects as India. For primary and secondary instruction, where twenty-five millions of children have yet to be taught, India had better work out its own simple plans, improving its existing school-buildings and cheap furniture. Any wholesale introduction, even for teachers, of the appliances that almost dazzle the visitor to Albert Hall, is at present to be deprecated." p. 47.

Still, an experienced man may get hints from such appliances and devise cheap substitutes in some cases.

STANDARDS.

A programme of study for elementary schools has been in force in England for a number of years. A well-regulated scheme of this kind is of great advantage. If a schoolmaster is allowed to teach what he pleases, disproportionate time will often be given to certain studies, while others are neglected. Besides, "Standards" facilitated comparison. Schools may have each so many boys in the "first class," but unless the studies are the same, the information is worthless.

The value of Standards depends entirely upon the skill with

* Bengal Public Instruction Report for 1864-65, Appendix A., p. 201.

which they are prepared. The first "Standards" under the new Code in England had, in some respects, a disastrous effect on education.

It is thus described by one of the ablest English Inspectors, Dr. Morell:—

"Under the old Code the intellectual stimulus applied was undoubtedly great. The teachers were full of life and took an interest in their work. The inner faculties were daily stirred into exercise by the necessity of giving ever fresh instruction. The logical training of grammar, united with the ever interesting facts of geography, popular science, and history, applied some daily incentive to work. The scholars felt the whole atmosphere of the school-room more or less charged with these intellectual forces, and were roused to equal interest in their lessons. The effects were seen in the eagerness with which the best boys in the school came forward as pupil teachers; the persistent affection with which the old scholars lingered over the scenes of their first mental awakenient, and the intellectual activity stirred up throughout the whole educational world.

"Most of this kind of educational stimulus has now passed away; the school-room has comparatively a colder and more mechanical aspect about it; and it seems impossible to arouse the same amount of personal interest, either in the teacher or the scholars by the present ordinary routine, as existed previously. I begin to fear that we have greatly overrated the surpassing value of reading, writing, and arithmetic in contradistinction to the more direct means of mental information and mental culture. If the education given in school is to be fruitful in after life it appears to me *essential* that it shall not consent merely or mainly in giving mechanical facilities, but that it shall arouse the intellectual powers, give some taste of what knowledge really means, and draw out the desire and will to acquire it. ... The watchword of the present day is to pay by results; but if the results we pay for represent no available mental growth it is a serious question whether in after-life they will not entirely fail of the purpose at which all primary education is supposed to aim—I mean the culture and elevation of the individual.

"I am quite aware that in making the school grants depend upon progress in reading, writing, spelling and arithmetic, it was never intended to *discourage* higher instruction or any direct means of mental culture, but simply to fix a minimum to which all scholars throughout the country are required to attain. But experience too surely demonstrates that in the majority of cases, if a money payment is attached to proficiency in certain specified branches, those branches, in the eyes of the teacher, will soon cast all the others into the shade. A large proportion of the primary schools in the country have been brought into existence under the stimulus of Government Grants, and are only calculated to carry on that existence by means of *their* support. To those grants the managers look to indemnify themselves for expenses annually incurred or promised; to them the teachers equally look to give

them the chance or rather certainty of a decent maintenance. Hence to gain an average grant every year, or something approaching it, is a matter of life and death, and must be secured at all hazards. To this point accordingly the scholastic eye turns all the year round, and to secure this primary necessity of school life every effort must be put forth. All the subjects which contribute to this rise at once in importance, and all which do not contribute to it sink into corresponding neglect. That which was fixed as the minimum for gaining the grant on every child, becomes the maximum of the teacher's aims and efforts, and everything else is, not perhaps intentionally, but certainly *practically*, discouraged by the enormous value attached to the required subjects. To make the *essential support* of the schools depend on reading, writing, and arithmetic has, I know, struck the death-knell in many a school to that higher teaching out of which intellectual stimulus is well-nigh *exclusively* drawn."*

Some improvements have since been made in the English Standards, calculated to obviate, to some extent, the above injurious consequences. English experience in this respect should be taken into account in fixing Standards for India.

Standards should also be proportioned to the ages and acquirements of the examinees. English Inspectors will scarcely believe that the following Standards were proposed in India for Vernacular Schools for Grants-in-Aid on the Results system :—

FIRST (LOWEST) STANDARD.†

Vernacular.

1. *Reading.*—(Easy school books), clear and intelligent.
2. *Writing.*—Legible to dictation in the ordinary current hand, without gross mistakes.
3. *Arithmetic.*—(Inclusive of Rule-of-Three), sufficient for market and household purposes.

SECOND (MIDDLE) STANDARD.

Vernacular.

1. *Reading.*—(Advanced), and explanation.
2. *Writing.*—Good and correct, to dictation.
3. *Arithmetic.*—Complete.

It is not surprising that after such rules had been in force for about four years, the Madras Government should have allowed that they had been "nearly a dead letter."‡

Modifications have since been made; but it is doubtful whether they are not yet too high. The Standards at the commencement

* Report of Committee of Council on Education, 1866-67, pp. 260-261.
† Report on Public Instruction in the Madras Presidency for 1864-65, p. 111.
‡ Proceedings of Madras Government, Educational Department, 20th October, 1867.

should not be more difficult than in England. They may be gradually raised with the advance of education.

More information is required about school age in India and the length of attendance. Mr. E. P. Arnold says even in England, "What amount of instruction have we a right to expect in schools where 75 per cent. of the scholars are under ten years of age, and 61½ per cent. have attended school less than two years?"* In August, 1871, there were 2,055,312 children on the registers of inspected schools in Great Britain, whose ages were as under:—

517,344 were under 6 years of age;
1,331,229 were between 6 and 12
206,739 were above twelve.†

In *Vernacular* Schools in India the ages must be still lower.

The Primary Schools in Ireland contained on the 1st January 1866, 635,009 children, whose studies were as follows:—‡

43·2	per cent. were in	First Book.
32·3	do.	Second Book.
16·9	do.	Third Book.
6·9	do.	Fourth and higher Books.

It will be seen what a small proportion of the pupils advance beyond the mere elements.

In India, as in England, of the ordinary subjects, arithmetic is that in which there are most failures. One modification is especially desirable in India. It is well known the difficulties with which female education has to contend. The children are very young and a good deal of time has to be devoted to sewing. At present they require to pass the same arithmetical Standards as boys. The consequence is that, beyond the mere elements, grants are obtained for very few. There should be easier Standards in their case, or girls might be allowed to pass in one standard lower than boys. It is vain to profess a zeal for female education, if the rules are such as, under the circumstances, practically to amount to discouragement.

Examinations under Standards.—There have been complaints in England about the different interpretation put upon the Standards by different inspectors. A change of inspectors may cause a considerable difference in a teacher's income. A question in "easy addition" is somewhat vague. It is very desirable that the Standards should be defined as clearly and minutely as possible. The explanation given under the New Code is

* Report of Committee of Council on Education, 1863-64, p. 24.
† Report of Committee of Council on Education, 1871-72, p. viii.
‡ Report of Royal Commission, p. 283.

preferable: "Simple addition and subtraction of numbers of not more than four figures."

The number of marks to be allowed, is also a question of some importance. The writer was present when a deputy inspector in the Madras Presidency was examining a vernacular school. He was kindly furnished with a copy of the table used. Under the head of "Reading," there were four columns. First was "Reading," which had 5 marks; next followed three columns for "Meaning," each of which had 5 marks. "Meaning" had 15 marks and "Reading" 5. In the case of beginners especially, this is a most absurd scale.

Full instructions to Inspectors, like those of the Committee of Council, should be issued, copies of which should be obtainable by managers of schools.

NECESSITY OF NORMAL SCHOOLS.

The importance of the teacher in education is well expressed by the axiom: "As is the master, so is the school." The following remarks apply in some respects with special force to India:—

"To very poor children the school is a substitute for a home; they frequently have no other experience of domestic comfort and decency, and the teacher and those who take an active interest in the school are the only persons of tolerably cultivated minds with whom they are brought into any thing approaching to an intimate relation. The influence which the personal character of the teacher exercises over the scholars is accordingly very great. 'As I go from school to school,' said Mr. Moseley, 'I perceive in each a distinctive character, which is that of the master; I look at the school and at the man, and there is no mistaking the resemblance. His idiosyncrasy has passed upon it; I seem to see him reflected in the children as in so many fragments of a broken mirror.'"*

The late Mr. Howard thus pointed out the qualifications desirable in teachers of primary schools in India:—

"The master must be a man of the people, not raised so much above them by knowledge and social position, as to alienate their sympathies. His business is to instruct, not to astonish.

"He should be able to teach intelligent reading, writing, and rational arithmetic, and this is all I would require him to teach in the way of positive knowledge. His own training will, however, require the most anxious care. It should be essentially the culture of the heart, and those modest virtues which elevate and sweeten the lot of the poor.

"The love of honest labour and independence, truthfulness of character, habits of order, cleanliness, and punctuality, frugality and forethought in money matters, loyalty and contentment. These are

* Report of the Education Commission, 1861, p. 89.

the hopeful seeds of civilization and not the knowledge which puffs up of a little literature and science.

"That we may have masters fitted to impress such a stamp on their pupils, they must be carefully selected, and placed for training and supervision under the very best men we can find. No rules or system can be trusted to; we must get men for our training masters, and pay them well."*

Contrast with the above ideal to be aimed at, the indigenous teacher as described by Adam :—

"As to any moral influence of the teachers on the pupils—any attempt to form the sentiments and habits and to control and guide the passions and emotions, such a notion never enters their conceptions."

Such men may indeed teach reading, writing, and arithmetic in a mechanical way, but as to their imparting any education worthy of the name, one might as well look for grapes on thorns. To attempt to educate the masses through small grants on results to indigenous teachers, may have the recommendation of cheapness, but is will be little more than mockery so far as real education is concerned. Though at the outset, it may not be wise to overlook such men, they should as soon as possible be superseded by carefully trained teachers.

According to the native proverb, an old bamboo will not bend. Training will have very little effect upon men whose habits are confirmed. Old teachers should be induced to send sons or some other relatives to be trained, in order that they may eventually take their place. Even in the case of the young, the training must not be too short. The opinion of Babu Bhudev Mukerji of the teachers who spent a year at a Normal School, quoted at page 22, is proof of this. Nor should the teachers of primary schools be prepared for their work by persons of low acquirements themselves. On the contrary, as Mr Howard remarks, they should be placed under "the very best men we can find."

When men have been trained, they must also receive suitable salaries. In the case of primary schools these cannot be high; but they must meet their necessary wants and have some degree of certainty. Though in England grants on results are now the rule, yet the teachers are under Committees, and receive their salaries regularly. Some such arrangement is necessary in India to secure satisfactory teachers. Really competent men will be unwilling to depend upon a precarious grant once a year. The primary school will thus be, as it has been, the "refuge of the destitute."

* Bombay Public Instruction Report, 1859-60, p. 230.

Every civilized country in Europe and America has recognised the importance of Normal Schools for the training of teachers. It is fully acknowledged in the Despatch of 1854:—

"87. In England when systematic attempts began to be made for the improvement of education, one of the chief defects was found to be the insufficient number of qualified schoolmasters, and the imperfect method of teaching which prevailed. This led to the foundation of Normal and Model Schools for the training of masters, and the exemplification of the best methods for the organization, discipline, and instruction of elementary schools. This deficiency has been the more palpably felt in India, as the difficulty of finding persons properly educated for the work of tuition is greater; and we desire to see the establishment, with as little delay as possible, of Training Schools, and classes, for masters, in each Presidency in India. It will probably be found that some of the existing institutions may be adapted wholly or partially, to this purpose, with less difficulty than would attend the establishment of entirely new schools."

The next paragraph directs attention to the Pupil Teacher System. The following acknowledges the necessity of taking into consideration the teacher's income, and of improving the indigenous masters:—

"89. You will be called upon, in carrying these measures into effect, to take into consideration the position and prospects of the numerous class of natives of India who are ready to undertake the important duty of educating their fellow-countrymen. The late extension of the pension regulations of 1831 to the educational service may require to be adapted to the revised regulations in this respect; and our wish is that the profession of schoolmaster may, for the future, afford inducements to the natives of India, such as are held out in other branches of the public service. The provision of such a class of schoolmasters as we wish to see must be a work of time; and, in encouraging the 'indigenous schools,' our present aim should be to improve the teachers whom we find in possession, and to take care not to provoke the hostility of this class of persons, whose influence is so great over the minds of the lower classes, by superseding them where it is possible to avoid it. They should, moreover, be encouraged to attend the Normal Schools and classes which may hereafter be instituted for this class of teachers."

The *Friend of India* remarks: "In a backward country like India the Normal School is the root of all successful education. If a man is what his mother makes him, still greater in such a country is the influence of his teacher. It is sad to be under the necessity of writing such platitudes year after year, but it is necessary."* Though the training of teachers has not been entirely neglected by the Indian Government, it must be con-

* Nov. 7th, 1867.

fessed that it has not received the attention it deserves. Hand in hand with the efforts to provide improved class books, should be the training of teachers. The Lieut.-Governor of the Punjab justly remarks, that on Normal Schools "all satisfactory educational progress must depend, and no endeavour to improve the character of their training should be wanting."*

The object of the writer is mainly to draw attention to School Books. The foregoing remarks are inserted to show that he fully realizes the importance of the training of teachers.

MANUALS FOR TEACHERS.

Three text-books of this class are required.

1. *Directions to Indigenous Teachers.*—A small manual of this kind will be of some service. It should explain, in the simplest manner, the subjects which require to be studied, the arrangement of classes, the keeping of registers, the rules for examinations, &c. One or two publications of the kind have already been issued.

2. *Manual for Vernacular Normal Schools.*—This would form a text-book for students under training, and be useful to them when they commence their work. In addition to the usual subjects, it would be well to add some remarks fitted to make them useful in the villages where they labour. They may promote sanitary improvements; they may cultivate habits of forethought, they may endeavour to prevent law suits, and in many other ways seek to advance the welfare of the people. Prudence is of course necessary, the want of which, accompanied by self-conceit, has too often made "reformers" stink in the nostrils of those sought to be benefited.

3. *Text-book for Teachers in English Schools.*†—This may not seem to be much wanted, as the works of Currie, Gill, Morrison, Laurie, Stow, and others are available. But there is not in them the principle of adaptation to India which has been so strongly urged. Let them be studied by all means, but let the teacher have, in addition, a treatise specially intended to fit him for his peculiar work in India. Many valuable hints would thus be given, not to be found in English manuals.

PREPARATION OF AN IMPERIAL SERIES OF SCHOOL BOOKS.

The great object of the foregoing remarks is to show the urgent necessity which exists for a complete series of School Books,

* Punjab Public Instruction Report, 1871-72, p. 11.

† Mr. Fowler, Inspector of Schools, Madras, prepared "Discipline and Instruction," forming Part I. of Method. It is very good, but it never seems to have been completed.

adapted to India, and including the latest educational improvements. Numerous attempts have been made in India to produce the books required. Though containing several good points, there are none up to the mark. The results seem to prove that a somewhat different course must be followed to secure what is wanted.

Lord Northbrook's Resolution requests the different local Governments to appoint Committees to examine and report upon existing text-books. This is admirable as a *first step*. The views of some of the ablest and most experienced men in India will be elicited, and valuable suggestions offered. Still, too much must not be expected from them. Helps has the following remarks on statesmen being pressed for time:—

"As it is, we are governed by men whose time and attention are so much occupied by all manner of details and claims upon them of all kinds, that they must look upon every body who approaches them as a bore to be got rid of. If the wisest man in the world wished to submit to a British minister the best suggestion of a fruitful brain, and if he succeeded in working his way to an interview with the minister, the probability is that the great functionary's pervading thought would be, How soon shall I get rid of this man? how much of my time will he occupy?"*

There are no gentlemen at large in India. All are busily engaged with important duties. When required to serve on Committees, probably, in most cases, they have somewhat of the feeling described by Helps.

Valuable as Committees are in many respects, for executive purposes they are far inferior to a single officer. The *second step* is the appointment of an Educational Commissioner to consider all the suggestions offered, to obtain any further information which seems desirable, to carry out plans with the very best assistance which can be obtained, and then to submit the results to the consideration of the Committees before they are finally adopted.

The preparation of an Educational Series is somewhat like designing a large magnificent building. Unity is necessary. It would never do to assign one wing to one architect and another to another. There must be one presiding mind. At the same time, the architect would employ subordinates to work out details, each according to his capacity.

It is a trite remark that nothing very valuable is to be obtained without great labour. To secure an educational series worthy of India, corresponding efforts must be employed. The work cannot be executed by men burdened with numerous other engage-

* Essays written in the Intervals of Business, pp. 144, 146.

ments. The most competent officer available in the educational department should be set apart for three years on special duty for its superintendence. The writer may venture to name Mr. Woodrow, for many years Inspector of Schools in Bengal and recently officiating Director of Public Instruction. His qualifications in every respect are such as to command the confidence of all.

To be adapted to India and include the latest educational improvements, the officer appointed should have the means of becoming thoroughly acquainted with the state of education in India, and with the best schools and school books in Europe and America. He must know, as far as possible under the circumstances, all that can be known. No man in India, however able, can do the work satisfactorily without this preliminary information.

The Commissioner would have the Reports of the Committees to start with. But these are not sufficient. It is desirable that he should be able to discuss plans with some of the members themselves, and ascertain with his own eyes the state of education over the country.

Report on Education in India.—Valuable General Reports, like Mr. Howell's "Note," have appeared at various times.* What is wanted however, is a *Special Report* of a *different character*.

Educational establishments may be roughly classified as follows:—

Indigenous Schools.
Village Vernacular Schools.
Town do.
Taluk Anglo-Vernacular Schools.
Zillah English Schools.
Colleges.
Universities.
Normal Schools.

The Commissioner should visit every great division of India, and personally inspect *representative* schools of each class. He should see good, medium, and inferior specimens. The average number of pupils in each, with their ages, the occupations of their parents, and the time they usually remain in school, should

* The "Notes" are very creditable to Home Under-Secretaries, with so many other important duties. It seems desirable, however, to have an educational Secretary to Government, or Minister of Public Instruction. There are numerous changes in the Home Under-Secretaries. They have not sufficient time to master the subject of education, and when they have gained some knowledge of it, they are posted to other offices. The Secretary might annually review the progress of education and literature in India, offering suggestions. Both subjects are of growing importance and the expenditure on such an office would be amply repaid.

be ascertained. The studies of each class, with the time devoted to each subject, should be noted. Specimens should be obtained of all the text-books; school buildings and school furniture should be inspected. Translations of the vernacular books should be made where necessary.

The Commissioner would learn a great deal by intercourse with educational officers, and would be able to discuss with them his plans. In addition, he should obtain in each Province a Memorandum from the Director of Public Instruction, containing his remarks on the existing state of education, with his suggestions for its improvement. Similar papers for each language, prepared independently, should be furnished by at least one European Inspector and one Native Deputy Inspector. The opinions of men like Babu Bandev Mukherji of Bengal and Babu Shiv Prasad, of Benares, would be of great value.

It is very desirable to know what the common people think of Government Schools. European and Native gentlemen unconnected with the Educational Department who have mixed much with the people, might be consulted on this point. Special inquiries should be made respecting the Muhammadans.

In six or eight months the Commissioner might prepare his Report on the *present state* of education in India. Each class of schools should be compared, commencing with the indigenous schools, and gradually ascending the scale.

The different modes of supporting schools, the rules respecting Grants in Aid, the extent of private education, &c., are some important points.

The Commissioner's Report should be printed. It would be valuable in India as containing many details not procurable except by great labour. It would be useful to educationists at home, whose aid was sought in any way, by enabling them to ascertain the present state of things.

It has been suggested that sketches should be prepared showing fully the condition of Indian ryots and artizans (See page 32). The Commissioner himself in his tours might occasionally visit a village, and hold some conversation with the people, through an interpreter. Good opportunities would be afforded for this when examining village schools.

Another proposal was that memoranda on the improvement of Indian agriculture should be prepared by competent men.

It was likewise recommended that the Sanitary Commissioners should furnish hints in their department (page 46).

All the above would be handed over to the Commissioner.

---

* Suggestions for its improvement should come afterwards.

Specimens should be obtained of all existing Indian School Books. Translations should be made of the most important of these in the vernacular, and selections of the most suitable apologues, &c.

The best photographs procurable of subjects required for illustrations, should be collected.

Procedure in England.—The Commissioner should go home when the Report on India has been drawn up. Specimens should be collected of the best English School Books,* and information obtained regarding the instruction given in Educational Institutions of different grades. The Secretary of State should obtain through the Ministers of Public Instruction, or other officers, sets of the three best series of School Books used in France, Switzerland, Holland, Prussia, Wurtemberg, Saxony, and the United States, with details regarding the classification and time-tables of the schools in which they are taught.

Some time should be devoted to the study of the materials thus collected. The Commissioner should next visit some of the best schools in Britain and on the Continent to get a better insight into their working, to see the educational apparatus, to make inquiries on doubtful points, and consult educationists about plans for India. It would also be advantageous to go over to America. The Board of Education, New York, has an excellent collection of the best American School Books. The Commissioner's office at Washington would yield some valuable information.

Having thus gathered materials and suggestions from all quarters, the preparation of the series would be commenced.

The books necessary for each grade of schools, with their size, would require to be considered. The allotment of space to each subject, and the periods at which it should be taken up, would be a very difficult question. Here consultation with different scientific men and others would be specially necessary. Officers connected with the "Science and Art Department" could give valuable advice.

The best writers for children would be employed on the elementary lessons. Scientific men distinguished both for their attainments and power of conveying knowledge in a simple form, should be engaged, each to prepare a series of lessons on his special subject. Professor Huxley, for example, might take Physiology. The conditions would be somewhat like the following: Suppose that he had an opportunity of giving three short lec-

* These might afterwards form the nucleus of an Educational Library in Calcutta. Specimens of cheap school apparatus should be added.

tures on the subject to children of eight years of age, what would he say? This would form the first course. Some of the children might attend future lectures; some would not. The next would be a course of six lectures to children ten years of age who had attended the first course; the third, one of nine lectures to children twelve years old.

Professor Tyndall might prepare similar lessons on Physical Science; Natural History, Botany, Manufactures, &c., might be taken up by other competent men. In some cases, simplification would be necessary. Any alterations of this kind, might be shown to the writers.

Lessons on several subjects could best be written in India. The Commissioner should have full power to obtain assistance from any quarter. At the same time, it would often be desirable that articles from India should be revised by practised writers at home.

Illustrations by the best engravers should be provided.

The Commissioner would be editor-in-chief, but skilled sub-editors should be employed to fit together the different lessons and suggest changes where they seemed desirable. Explanations should be given of difficult words and allusions.

Small editions of the books, with broad margins, should first be printed. Specimens should be sent out to the Indian Directors and School Committees for report. The remarks made should be carefully considered, and after any changes which seemed necessary had been made, the books might be stereotyped. The English editions would thus be provided.

Final Report.—It has been suggested that the Commissioner's *first work* should be to report upon the existing state of education in India. His *last* duty would be to draw up a Report, embodying the principal results of his inquiries, and stating the courses of instruction he would recommend for the different grades of Educational Institutions in India. As far as space would admit, he might show the practice under a few of the best educational systems. One illustration may suffice. It would be interesting to know the course of instruction in a village school in Holland, Prussia, Switzerland, &c., respectively.

The Reports on French, German, and American Schools by Messrs. Arnold, Pattison and Fraser, though able, do not enter sufficiently into detail. A Report on Education in Europe by President Bache gives a better idea of what is required. It is now rare, but extracts are given in Barnard's "Education in Europe."

University studies would be an interesting subject. If time permitted, they might be included in the Report.

Vernacular Editions.

The principal works in all the Indian vernacular languages are free translations from Sanskrit originals. The same course might be followed with School Books. The English, prepared with the greatest care in the manner previously mentioned, would be transfused into the various vernaculars by the most competent native scholars. To secure accuracy of idiom, there should be associated with each a good scholar unacquainted with English.

The Madras Public Instruction Report for 1858-59 thus states the advantages of the above plan:—

"It is of more importance than it may at first sight appear that every Indian School book should be written in English in the first instance. It does not follow, nor is it probable, that the persons most competent to make use of the vernacular languages will be always equally well qualified to prepare a school book or to judge of the merits of one when prepared. If the basis be laid in English, the merits of the book can be judged of by those most qualified to form a judgment as regards the manner in which the subject is treated. The style of the translation must, of course, be left to the translator and to those appointed to superintend and revise his labours."

Some changes would indeed be necessary. The introductory lessons in the First Book, though prepared on the same principle, would be totally distinct. There the subject-matter must be made subordinate to teaching to read.

There would be some other changes desirable. Jute, for example, might be specially noticed in Bengal; cotton in some other parts of India. The selections from native books would also differ.

Prices of Books.

The English School Books should be stereotyped in England. Printers and binders might supply copies at certain rates. By degrees, the Vernacular Editions may also be stereotyped. A knowledge of the process is slowly spreading over India.

The prime cost of Editions on such a scale and without the profit of private publishers, would be low. In fixing prices, different rates should be adopted for English and the Vernaculars. The former is learned simply as a means of obtaining more lucrative employment. The pupils are generally in fair circumstances, and are both able and willing to pay reasonable prices for their text-books. On the other hand, the Vernaculars are much less valued, and studied by the poorer classes.

The course should, therefore, be to raise the prices of English books so as to make them cover the cost of agency, &c., and to sell the Vernacular editions at the lowest rates possible.

The books should be sold at the same rates all over India. The prices should be stamped upon them, to ensure uniformity as far as possible.

CIRCULATION OF BOOKS.

This is a matter of considerable importance. The issues may be increased to a very large extent if proper means are employed.

With the exception of Bengal, the circulation of Government School Books is chiefly effected through Government Book Depôts, under Curators. The Madras Government has a Central Depôt in Madras and 19 Mofussil Depôts. The Report for 1870-71 mentions that 22 colporteurs were employed; though it seems that they have since been discontinued. In Bengal, the Calcutta School Book Society, which has about 130 agents in different parts of the Presidency, is the medium of circulation.

The terms of sale differ. At Madras and Bombay no discount, except to recognized agents, is allowed on any purchases however large. At Allahabad, discounts at the rate of 20 per cent is allowed on purchases of educational books to the extent of 50 rupees. The same rate is allowed at Lahore on vernacular books, and 10 per cent on English Books. The Rules of the Calcutta School Book Society are as follows:—

"On purchases above 5 Rupees, ready money, a discount of 25 per cent."

"No discount whatever allowed on purchases below 5 Rupees."

Mofussil* Government Book Depôts may be necessary at the commencement, but the great object should be to encourage the "Trade." Native booksellers' shops can only be looked for in large cities, but very many of the native shopkeepers are willing to sell books along with other articles. A few years ago the writer was led to make inquiries about the circulation of vernacular books printed in Madras. He was surprised to find what a network of agency there was over the country for this purpose.

It is evident that native shopkeepers will not keep books on sale unless they yield a profit. Throughout the whole Madras Presidency no native shopkeeper can purchase Government School books except at the full prices. It is true that the books may be sold at higher rates, but as the usual prices are well known, there is a difficulty about this.

The Allahabad and Lahore rules are insufficient. A petty shopkeeper cannot be expected to invest Rs. 50 in books alone. Those of the Calcutta School Book Society should be adopted.

School books afford one of the best means of developing bookselling. There is very little demand except for school books, poetry,

* Central Book Depôts are, however, desirable.

and tales. The people, as a rule, are not yet sufficiently advanced to appreciate anything else. Even in Bengal, a native newspaper complains that works on science become only a prey to insects.

Curators, taking a short-sighted view, may object to the proposed allowance. Prices should be fixed so that even vernacular books, *deducting discount*, should yield about 5 per cent profit; 20 per cent profit might be realized on English books. The Book Department ought to be made self-sustaining; but this should be secured by large sales.

No publisher in London is so foolish as to withhold the usual trade allowances. The Indian Government must act upon the same principle, if similar results are to be obtained.

Book Postage.—This is intimately connected with the circulation of books and the usefulness of education. It is a truism that it is of little use to teach a person to read if he has nothing to read afterwards. To increase the grant for education and put increased difficulties in the way of obtaining books, is a policy which cannot well be reconciled.

The Educational Despatch of 1854 was received in India while that great statesman, Lord Dalhousie, was Governor-General. A system of cheap postage was inaugurated about the same time. Though the railway system had just been commenced, book postage was fixed at 20 tolas for an anna. With far-seeing policy, he sought to utilize education by giving special facilities for the circulation of literature.

After the rates had been in force for more than ten years and the trunk lines of railway were well-advanced, a narrow-minded Director-General managed to make a retrograde movement, and increased book postage one hundred per cent. Even the system of charging according to weight has only been partially followed. In England the lowest letter rate is taken as the unit for book-post. In India the smallest pamphlet cannot be sent by book-post except at double the letter rate. Hence there is the anomaly, that while a pamphlet may be sent to England for eight pice, it costs an anna to send it to the nearest town, or two annas to send it to Ceylon.

The old rates of book postage gave great facilities for the circulation of books. At present, for low-priced vernacular books, the charges are almost prohibitory.

USE OF OTHER BOOKS.

While the Government Series should alone be used in Government Schools,* this should not be compulsory in aided schools.

* This will be disapproved by some, and it is admitted that there are objections, but it seems best on the whole. A Director of Public Instruction may be ignorant

To prevent, however, the use of trashy books, it seems desirable to have a recognized list of books. This course is recommended by several Inspectors in England.

Periodical Revision.

While one Series for all India is desirable, it will also be necessary that every ten years there should be a thorough revision. The Directors of Public Instruction should be consulted about the changes necessary, and, to a large extent, the first process would require to be repeated.

Frequent changes of books cause much practical inconvenience in schools. This will be avoided and the work done much more satisfactorily, by a periodical revision. Errors can, of course, be corrected at any time.

Conclusion.

The chief object of the foregoing remarks is to advocate a thorough reform of the present educational machinery, and the appointment of a Commissioner as the only means by which it can be carried out satisfactorily. Other measures may secure improvements here and there, but there cannot be the radical change which is necessary. They have been tried and found wanting.

The outlay would be small compared with the annual educational expenditure. Probably £20,000, distributed over three years, would meet the entire cost, exclusive of the printing of books which would repay themselves.

It is true that the success of the scheme would depend very largely upon the selection of the Commissioner; but this is the case with regard to almost every undertaking. It would soon be evident whether he was "the right man in the right place," and a change could be made if necessary.

Lord Northbrook has expressed his dissatisfaction, to some extent, with the existing state of education in India. In the Providence of God, His Excellency who took a leading part in the preparation of the Despatch of 1854, is, after the lapse of eighteen years, placed in the position which enables him best to carry out its plans. By the course proposed, knowledge gleaned from all countries might be brought to bear upon the improvement of education in India, and text-books as excellent as could be prepared at present, would be provided in all the languages of India before His Lordship's term of office expires.

---

of some of the first principles of education. He may have a weakness for writing school books himself, in which case others of a similar character would be wanted. Still, whether the use of the Imperial Series be made compulsory or not, it should be prepared as a model, or at least as an experiment.

The writer has lived long enough not to expect any great and immediate results from the measures proposed. The author of the "Natural History of Enthusiasm" well remarks:—

"The kind-hearted schemer, fertile in devices for beguiling mankind into virtue, and rich in petty ingenuities, alones well-intended and seldom well-imagined, rarely believes that his machineries of instruction or reform require only to be put fairly, and they will bring heaven upon earth."

Changes in a mighty empire like India must be slow. Still, no well-directed effort for the good of the people will be lost. "Cast thy bread upon the waters, for thou shalt find it after many days."

Whatever may be the result of the present appeal, the writer esteems it a privilege to endeavour to seek the benefit of the great country in which the best years of his life have been passed.